

The University of Wolverhampton
School of Construction Engineering and Technology

**A METHODOLOGY FOR EVALUATING THE MARKETING
FUNCTION IN THE UK CONSTRUCTION INDUSTRY.**

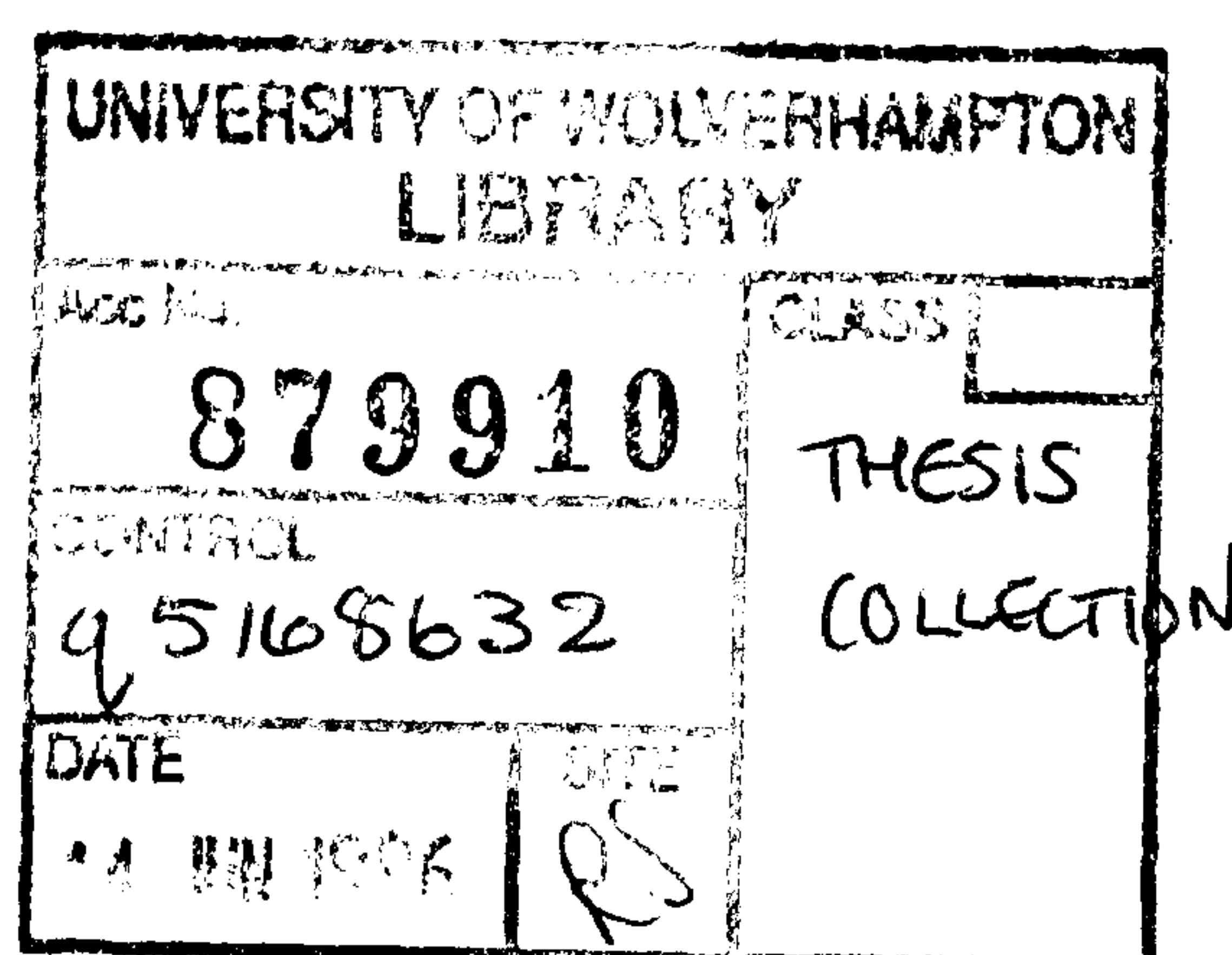
BY

SILAS BABAJIYA YISA, B Eng (Hons), MSc (Eng).

**A Thesis Submitted in Partial Fulfilment of the Requirements of the
University of Wolverhampton for the Degree of Doctor of Philosophy**

SILAS BABAJIYA YISA

PhD



1995

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December 1995

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DEDICATION

This work is dedicated to the loving memory of my late brother and friend, **James Mamman Yisa**, from whom I have learnt that education, experience, and memories are three things no one can take away.

TABLE OF CONTENTS

Contents	Page
Dedication	i
Abstract	iii
Declaration	v
Acknowledgements	vi
Lists of Chapters	vii
List of Appendices	xvi
Lists of Tables	xvii
Lists of Figures	xix
Chapters	1
References	258
Appendices	272
Glossary	326

Abstract

The UK construction industry holds a major place in the British economy contributing an average of 6.2% of the total GDP for the UK and employs on average about 5.6% of the nation's employees in employment.. The industry is a complex interaction of a number of different types of organisations. At the hub of the industry are the professional (Designers) firms responsible for the technical and the engineering aspects of construction; and the "Main Contractors",- the organisations that co-ordinate and execute construction projects.

Like many non consumer based industries, the construction industry has been slow to adopt the marketing concept. Marketing concept suggests a totally new way of looking at a business and would mean a departure from the traditional approach management of these firms.

This study was set out as an exploratory study to investigate management and practice of the marketing function in construction industry, with a view to identify a wide range of marketing activities currently being carried out by the firms and criteria for setting marketing objectives.

The study identified a wide variety of marketing practices currently being employed in the industry, and a wide range of marketing objectives as set by firms. The survey also found that marketing is still poorly managed in the industry. The study identified a wide range of factors affecting effective marketing practice in the industry. Further to this a case study was conducted to provide some psychological explanation to many of the issues arising from the main survey.

Up till now, no comprehensive quantitative model for evaluation of marketing function is available to assist the construction firms in assessing their marketing practices. This report presents a quantitative model based on elements of efficiency and effectiveness of

marketing practices within the UK construction firms. Although it is still at a preliminary stage it holds a great potential as an effective instrument for evaluating marketing practices in construction.

Three different approaches were adopted for testing of this model. First, to test the characteristic average grading function for the industry as given by the model in Chapter 8. Second, to demonstrate how to apply this model to a group of individual firms and the interpretation of results. Third, sensitivity analysis to study the responses of grading function to changes in the variables of the model construct. The three steps show that this model can, with a high degree of accuracy, show the marketing position of a firm and also detect any managerial and resource deficiencies concerning marketing practices within the firm. The tests re-echoed a general lack of commitment on the part of senior managements in the industry to marketing function.

Acknowledgement

The research described in this thesis has been completed in the area of marketing of construction services with the help, advise and encouragement from many individuals and organisations.

First of all, I will like to express my gratitude to the School of Construction Engineering and Technology and the Research Support Unit of The University of Wolverhampton, my sponsors. My gratitude also goes to the Head of School, Professor F. C. Harris for his support and invaluable advice during the course of this research. I thank you all for believing in me.

I am indebted to **Dr. Issaka E. Ndekugri** (Mallami da Mai Gidan Mu) for his invaluable assistance, contribution and encouragement throughout the course of this research. I will also like to thank **Mr Brian Ambrose** my second supervisor for his assistance and support.

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LIST OF CHAPTERS

Chapter	Description	Page
Chapter I:	General Introduction	1
1. 1.0	Preamble	3
	1.1.1 Marketing in Construction	3
1. 2.0	Available Field Studies	4
1. 3.0	Aims and Objectives of the Research	6
1. 4.0	The Need for this Research	8
1. 5.0	The Scope of the Research	10
	1. 5.1. Geographical Scope	10
	1. 5. 2. Chronological Scope	10
	1. 5. 3. Type of Company	11
1.6.0	Research Methodology	11
1.7.0	The Main Findings	13
	1.7.1. Management and Organisation of Marketing	13
	1.7.2. Marketing Activities	13
	1.7.3. Marketing Objectives	14
	1.7.4 Factors Influencing marketing Practices	14
	1.7.5 Marketing Evaluation System	15
1.8.0	The Significant of the Research	15
1.9.0.	Organisation of the rest of the report	16
Chapter II:	Research Methodology	20
2. 1.0	Introduction	21
2. 2.0	Methodology	22
	2.2.1. Telephone Interview	22
	2.2.2. Person-to-Person Interview	22
	2.2.3. Self-Administered Mail Survey	22
2.3.0	Literature Review	24

Chapter	Description	Page
2.4.0	Design of Questionnaire	25
2.5.0	Pilot Survey	27
	2.5.1. Marketing Objectives	28
	2.5.2. Marketing Activities	28
	2.5.3. Strategic Issues	31
2.6.0	Main Industry-wide Survey of Firms	31
	2.6.1 Sample Frame and sampling Method	31
2. 7.0	Method of Analysis	32
	2.4.1. Method of Sorting out Samples	32
	2.4.2. Measurements of Variables	33
2. 8.0	Model Development	33
2. 9.0	Model Validation	34
2.10.0	Case Studies and Interviews	35
2.11.0	Summary	35
Chapter III:	The UK construction industry	36
3. 1. 0.	Introduction	37
	3.1.1. Classification	37
	3.1.2 Composition	38
3. 2. 0:	Characteristics of the industry	38
	3. 2. 1: The Physical Nature of the Products	39
	3. 2. 2: Method of production	39
3. 3. 0	Structure of the Industry	41
	3. 3.1: Structural composition	41
3. 4. 0	Determinants of Demand	42
3. 5.0	Method of Price Determination	45
3. 6. 0	The Construction Client	47

Chapter	Description	Page
	3.6.1. The public Client	48
	3. 6.2. The Private Client	49
3.7.0	The Placing of Contracts	51
	3. 7. 1. Traditional Procurement	51
	3. 7. 2. Design and Build	54
	3. 7. 3. Management Contracting	55
	3. 7. 4. Construction Management	56
3. 8.0	Education and Training	58
3.9. 0	Summary	59
Chapter IV:	An Introduction to Marketing	60
4. 1. 0	Introduction	61
4. 2. 0	Understanding the Marketing Concept	61
	4. 2. 1. Aspects of Marketing Mix	65
	4.2.1.1. Services/products planing	67
	4.2.1.2. Promotional Activities	67
	4.2.1.3. Price/fee Structure	67
	4.2.1.4. Place	68
4.3. 0	Aspects of Industrial Marketing	68
	4. 3. 1. Industrial Buying Behaviour	69
	4. 3. 2. Organisational Buying Behaviour	70
	4. 3. 3. Product/service classification	71
	4.3.3.1. Raw material	71
	4.3.3.2. Capital Goods	71
	4.3.3.3. Accessories/production equipments	72
	4.3.3.4. Consumables	72
4. 4. 0	Marketing of Services	72
	4.4.1 Characteristics of Services	74
	4.4.1.1. Intangibility	75
	4.4.1.2. Production/consumption interaction	75
	4.4.1.3. Lack of ownership attransection	75

Chapter	Description	Page
	4. 4.2. Aspects of Service Marketing Mix	76
	4.4. 3. Strategies for Services Marketing Mix.	76
	4.4.3.1. Internal marketing	77
	4.4.3.2. Interactive Marketing	77
4. 5. 0	Measurement issues in Marketing	79
	4.5.1 Measures of Marketing performance	79
	4.5.2. Multiple-Criteria Measures in Marketing	80
4. 6. 0	Marketing Performance Evaluation	83
4. 7. 0.	Summary	88
Chapter V: Marketing in Construction Industry		90
5. 1.0	Introduction	91
5. 2. 0	Traditional approach	91
	5. 2.1. Shortcomings in Traditional Practices	92
5. 3. 0	Available field studies	93
5. 4. 0	Marketing management	95
5. 5. 0	Current Marketing Practices	98
5. 6. 0	Marketing Activities	101
	5. 6.1. Market research	101
	5.6.2. Products/Services research	101
	5. 6.3. Price/fee strategies	102
	5. 6.4. Corporate Identity Programmes	102
	5. 6.5 Advertising	103
	5. 6.6. Public Relations	103
	5. 6.7. Personal Selling:	104
	5. 6.8. Information Services	104
	5.6.9. Strategic Alliances	104
	5. 6.9. 1. Pre-project proposals	105
	5. 6.9. 2. Joint ventures	105
5.6.10.	Publications and brochures	106
5.6.11.	Conferences and Exhibitions	106

Chapter	Description	Page
5.6.12.	Sponsorships	107
5.6.13.	Support and Employees' Participation	107
5.4.0	Summary	108
Chapter VI:	Current Trends and Changes	109
6. 1. 0	Introduction	110
6. 2. 0	Concepts of Change and Innovation	111
	6. 2.1: Response to Change	112
6.3.0	Current Trends in the Industry	113
6.4.0	Changes in the industry's Structure	116
6. 5.0	Fluctuation in workload	118
	6.5.1. Construction Orders	119
	6.5.2. Construction Output	120
	6.5.3. Overseas Works	121
6. 6.0	Construction Clients	122
6. 7.0	Procurements Systems	123
6. 8.0	Formation of Cross-Boarder Trading Blocks	125
6. 9.0	Competition	126
6.10.0	Developments in Technology	127
6.11.0	Construction Management Education	128
6.12.0	Implication for Marketing	128
6.13.0	Summary	129
Chapter VII:	The Results of the Survey	132
7.1.0	Introduction	133
7.2.0	Responses to the survey	134

Chapter	Description	Page
7.3.0	Management of marketing function	136
	7.3.1. Marketing Planning	137
	7.3.2. Control of marketing programmes	140
	7.3.3. Marketing Resources	140
7.4.0	Current marketing practices	143
	7.4.1. Marketing effort	143
	7.4.2. Effectiveness of marketing activities	148
7.5.0	Marketing orientation	157
7.6.0	Corporate Values	161
	7.6.1 Corporate Marketing Objectives	163
7.7.0	Achievement on Marketing Objectives	166
7.9.0	Summary	170
Chapter VIII: The Model		172
8. 1.0	Introduction	173
8. 2.0	Marketing Models	174
	8. 2. 1. Modelling Approaches	175
	8.2.1.1. The BCG Matrix Model	175
	8.2.1.2. The PIMS Model	176
	8.2.1.3. The MPA model	178
8. 3.0	The Proposed Model	179
	8.3.1. Conceptual Framework	180
	8. 3.2. Model Construct	181
	8.3.2.1. Corporate Characteristics	182
	8.3.2.2. Management Style	182
	8.3.2.3 . Marketing Skill	183
	8.3.2.4. Corporate Values	183
	8.3.2.5. Organisational Commitment	183
	8.3.3. Quantifying the Construct	183
	8.3.4. Reliability Analysis	185
	8.3.5. Construct Validity	186
	8.3.6. Multiple Regression Analysis	188

Chapter	Description	Page
8.4.0.	Model Formulation	190
	8.4.1. Data Entry	191
	8.4.2. Weighted constants	193
	8.4.3. Weighted Scores	194
	8.4.4. Performance Index	196
	8.4.5. Performance Grading Function	197
Chapter IX:	Model Validation Analysis	202
9.1.0	Introduction	203
9.2.0	Procedure for Validation	203
	9.2.1. Validation Curve	204
	9.2.2. Worked Examples	207
	9.2.3. Sensitivity Testing of the Model	212
9.3.0	Summary	214
Chapter X:	Case Studies and Interviews	217
10.1.0	Introduction	218
10.2.0	Contractors cases	219
	10.2.1. Contractor A: A Large International	219
	10.2.2. A Large National Contractor	223
	10.2.3. Medium Size National Contractor	226
	10.2.4. A Medium Size Regional Contractor	229
	10.2.5. Small Regional Contracting Company	232
10.3.0	Cases From Design Firms	234
	10.3.1. A Multi-disciplinary Design Practice	234
	10.3.2. Small Size Regional Design Practice	237
10.4.0	A Framework for Marketing Practice	238
	10.4.1 Planning and Strategic formulation	239
	10.4.1.1 Marketing Activities	241

Chapter	Description	Page
	10.4.2 Implementation and Control	242
	10.4.3 Evaluation and Marketing Intelligence	242
10.5.0	Summary	243
Chapter XI: Conclusions and Recommendations		245
11.1.0	Introduction	246
11.2.0	Research Methodology	247
11.3.0	Findings of the Research	247
	11.3.1. Literature survey	247
	11.3.2. Pilot survey and interviews	248
	11.3.3. Industry-wide postal survey	248
11.4.0	The Model	250
	11.4.1. Validation	250
11.5.0	Case Studies and Interviews	251
11.6.0	Conclusions	251
11.7.0	Recommendations	253
11.8.0	Further Research	254
REFERENCES		256
APPENDICES		270
APPENDIX A	Research Questionnaires	271
APPENDIX B	Interview Questionnaires	279
APPENDIX C	Responding Firms	287
APPENDIX D	Associated Publications	296
APPENDIX E	Basic Statistical Tests	300
APPENDIX F	Some Statistical Outputs	311
APPENDIX G	Glossary	323

LIST OF TABLES

TABLE	DESCRIPTION	PAGE NO.
1.1	Construction Industry and the UK Economy	8
1.2	Research Methodology	12
2.1	Marketing Objectives	29
2.2	Marketing Activities	30
3.1	Different forms of contractual arrangements	45
4.1	Multiple-criteria measures of marketing performance	82
4.2	Buzzell and Heany's independent Variables	85
4.3	The growth-share matrix	85
7.1	Results of Survey Mailing	134
7.2	Response categories	135
7.3	Response categories by size of firm in annual turnover	135
7.4	Response categories by size of employees	135
7.5	Top management's perceived level of priority on marketing plans	136
7.6	Organisation and management of marketing function	137
7.7	Formal and Non-formal Marketing Planners	138
7.8	Responsibility for marketing Plans	138
7.9	Characteristic Time Frame for Marketing Plans	139
7.10	Monitoring of marketing programmes	140
7.11	Response categories by size of marketing employee	141
7.12	Firms Employing marketing professional	141
7.13	Use of external marketing agents	142
7.14	Average Annual Expenditure on Marketing	142
7.15	Contractors' marketing efforts	145
7.16	Engineers' marketing efforts	146
7.17	Architects marketing efforts	146
7.18	Overall ranking of effort on marketing programmes	147
7.19	Effectiveness of contractors' marketing programmes	149

TABLE	DESCRIPTION	PAGE NO.
7.20	Effectiveness of engineers' marketing programmes	149
7.21	Effectiveness of architects' marketing programmes	150
7.22	Overall ranking of effectiveness of marketing programmes	150
7.23	Contractors' ratings on orientations in firms	158
7.24	Engineers' ratings on orientations in firms	159
7.25	Architects' ratings on orientations in firms	159
7.26	Comparison of ranks on orientation in firms	160
7.27	Perceived importance of marketing objectives (Contractors)	164
7.28	Perceived Importance of Objectives (Engineers)	164
7.29	Perceived Importance of Objectives (Architects)	165
7.30	Ranking of Marketing Objectives	165
7.31	Contractors' Achievement on Marketing Objectives	167
7.32	Engineers' Achievement on Marketing Objectives	167
7.33	Architects' Achievement on Marketing Objectives	168
7.34	Overall Ranking of Achievements on Marketing Objectives	168
8.1	Measures Used to Capture Constructs	184
8.2	Total Sample Reliability of Scale (Alpha)	187
8.3	Determinants of achievements on marketing objectives	189
8.4	Determinants of marketing effectiveness	190
8.5	Weighted constants (W)	193
8.6	Weighted Scores on principal components	195
8.7	Performance Index Grading Function (I)	197
8.8	Model Interpretation System	200
9.1	Weighted scores from validation sample	204
9.2	Performance grading function for validation sample	205
9.3	Rated Scores on Constructs (T)	210
9.4	Weighted Scores (S)	211
9.5	Performance Indices	211

LIST OF FIGURES

FIGURES	DESCRIPTION	PAGE
1.1	Thesis Organisation	12
2.1	Procedures for model development	34
3. 1	Simplified Model of Traditional Process	40
3.2	The Structure /Communication Channel in the Construction Industr	42
3. 3	Favourable requirements for demand for construction services	44
3.4	Contractual relationships between parties in traditional procurement	52
3. 5	Contractual relationships between parties in Design and build	54
3.6	Contractual relationships between parties in management contracting	56
3.7	Contractual relations in construction management procurement	57
4.1	The 4Ps of the Marketing mix.	66
4.2	Managing the perceived service quality	78
6.1	Cumulative percentage changes in number of firms by sizes	117
6.2	Insolvencies of construction firms	118
6.3	Cumulative % change in new orders obtained by sizes of firm	119
6. 4	Fluctuation in construction output	120
6.5	Total overseas new orders (1982 - 1992)	121
6. 6	Changes in the spread of procurement method	125
8.1	Diagrammatic representation of the model concept	181
8.2	Performance Grading Function for Evaluating Marketing practice	199
9.1	Model Validation Grading function	206
9.2	Model Validation Grading function	212
9.3	Percentage changes in Grading Function	214
10.1	Reporting Structure of Company A	220
10.2	Structure Chart of Contractor B	224
10.3	Structural Chart of Contractor C	227
10.4	Management Structure of Contractor E	232
10.5	Management Structure of Design Firm A	235
10.6	Management Structure for Design Firm B	228
10.7	Systems Framework for Improving Marketing Practices	240

Chapter I
General Introduction

“Creating a customer, finding a potential market, evaluating capacity, planning ahead the capacity of a building enterprise - these exciting aspects of building activity really must interest someone” - (**The Builder, 15 November 1975**)

Chapter One

General Introduction

1. 1. 0: Preamble

The shortcomings of construction firms regarding their ability to adopt modern management systems and techniques has been written about extensively (Lansley, 1987; Oglesby, 1989; Harris, 1991). In particular, the ability of the construction industry to innovate and manage change has been widely debated over the years (Yisa et al, 1995a). Lansley (1987) argued that in an environment characterised by competitive change, there is need for creating systems and procedures which can develop slowly and in sympathy with incremental changes in the environment and ensuring that skills are updated regularly and appropriately. Oglesby (1989) opined that construction firm owners do not seem to be aware of the economic pay-off to be derived from the appropriate use of modern management systems and are, as a consequence, unwilling to incur the cost of operating these systems on their construction projects.

On the point of the industry's attitude to marketing many writers have pointed out that whilst marketing has been established in manufacturing and many services industries, in construction it has largely either been ignored or grossly misunderstood (Fisher, 1989; Pearce, 1993; Langford and Fellows, 1993). For example, Fisher (1989) revealed there were many deeply held misconceptions about the appropriateness and value of general management skills and marketing skills in particular. The low priority given to marketing in industry is reflected in the paucity of reported research and helpful general literature on the subject (see Yisa et al 1995b). Until this aspect of the operations of construction businesses is researched and good practice and their benefits identified and disseminated the desired improvements cannot be achieved. To this end the programme of research presented in this thesis was initiated.

1.1.1. Marketing in Construction

The most common theme running through the available literature is that the construction industry has performed very poorly in marketing its services and products. Many reasons

have been advanced to explain this shortcoming (See Chapter 5: sec. 5.4.0)

At a general level, compared to other construction management functions such estimating, scheduling, and cost control, literature on marketing in construction is very sparse. This means the industry's professionals are being educated without a systematic study of this important aspect of management. Lack of training in marketing is part of a wider problem of management training in the industry (Friedman, 1984; Harris, 1991).

One of the main reasons argued by Friedman (1984), is that perhaps the contractors and professionals have never in the past met with difficulties in obtaining the required level of works to maintain survival and profit. They are therefore inclined to think that their reputation and the quality of their work will continue to win new orders. In many cases contractors and professionals alike believe that the most important part of the organization is the production side, i.e, they are production -oriented rather than marketing-orientated. They look for opportunities that fit their capabilities as contractors, rather than adapting their capabilities to suit current and future market opportunities. There is a wide perception that only clients can create demand for work that the firms and themselves can not do so (Bell, 1981; Pearce, 1992).

1.2.0: Available Field Studies and Investigations

The literature review revealed no significant interest in marketing in construction prior to the 1980's. However, within the last two decades there have been various attempts at research into this area. Virtually all have concentrated on the essence of marketing in construction and the perception of the industry on the importance. Construction researchers have also grappled with exactly what constitute marketing in construction

For example, Bell (1981), examined and compared attitudes to, and organisation of, marketing within construction firms within the UK. He thought at the on set of the research that marketing strategy could be developed based on the distinctive service industry features. But the search for a distinctive set of service marketing feature relevant to construction industry was not fruitful.

Similarly, Hardy and Davies (1984) found out in their research that many firms exhibited an indifferent attitude to marketing. Fisher (1989) also commented on the unbalanced view of marketing and found that to a surprising large number of firms, marketing appears to be synonymous with selling, business lunches, and “double-glazing hype”. Yet marketing, as a science and business philosophy, he argued, is taught as a serious subject to the cream of business managers and other professionals in almost every other industries.

Morgan and Morgan(1990) concluded from a study of marketing communication in the UK construction industry that marketing is still a new phenomenon viewed with skepticism. Shearer (1990) highlighted the problem of conceptualising marketing in construction. That research also found a prevalence of the view of that marketing in construction is in essence selling promises because the client is normally being asked to buy something that does not exist. Pheng (1990) observed that marketing has attracted only little attention among construction contractors and professionals alike. Similarly, Morgan and Burnicle (1991) noted that the UK construction industry has been slow in adopting marketing principles. Many construction enterprises still often fail to realise that marketing entails more than just playing with few isolated promotional tools, such as; distributing brochures, advertising, film show, which they often employ without following a structured marketing plan formulated in line with the organisations’ aims and objectives.

The conceptual difficulty is only a part of the wider debate as to what marketing is. For example, Namo and Fellows (1993) found a wide variety of definitions of marketing even among marketing professionals and supported their argument with two definitions by Kotler(1986) and Ohmae(1988). Kotler defines marketing in terms of human activity directed at satisfying needs and wants through exchange, while Ohmae saw it as discovering what customers want and orienting the firms to satisfy those wants. Payne (1988) views marketing orientation to be the degree of responsiveness of an organisation to its market needs.

Construction researchers had also run into similar problems with the definition of marketing. For instance, Arditi and Davis (1988) described marketing as consisting of activities such as finding new markets, evaluating job potentials, establishing contacts with

potential clients gaining information regarding market conditions, potential customers and projects, prequalifying with clients, estimating project cost, submitting proposals, entering into contracts, negotiating changes and claims and finally developing new technology or different contract forms.

More recently, Betts and Ofori (1992) observed that competition in the construction industry has increased considerably in recent years due to influences resulting from changes in technology, changes in client desires as a result of variation in taste, aspiration and purchasing power. As a response to these external influences, competition within the construction industry has become more intense and sophisticated as firms adopt practices and procedures to help them survive.

1.3.0: The aim and objectives of the research

A review of literature shows that previous studies, notably by Bell (1981), Fisher (1989), Morgan and Morgan (1990) and Langford and Fellows (1993) have all concentrated on the essence of marketing and marketing practices. No reported study has been aimed at identifying and disseminating best practice or suggesting improvement. On a general note, it can be concluded from the literature survey that; (1) there is the unanimity that approaches are based on narrow concept of marketing; (2) there is a paucity of available published work on this topic; (3) that to an organisation that recognises the shortcomings in its marketing function, there is no information in the public domain on good practice regarding the structuring and resourcing of the marketing function, how it relates to other functions of the organisation, objectives of the marketing function and priorities among them and specific activities that must be pursued to achieve these objectives.

In general management literature, marketing has been identified as a central function capable of enhancing business growth and survival. A review of literature on marketing of construction services has shown that this important function is less-well developed in the UK construction industry. It was with this realisation that the research was embarked upon to remedy these shortcomings not only for practitioners in the industry but also for the growing academic community with interest in marketing in construction. By this objectives,

the research hopes was designed to evaluate the marketing function as currently performed within the construction firms, establish a number of strategic issues and at the same time identify activities which offer distinct marketing features for construction, to disseminate best practice and suggesting any improvements. To achieve this aim, the following objectives were set :

- I. to investigate management and organisation of the marketing function viz:
 - (a) level of awareness and commitment to marketing;
 - (b) level of integration with other functions of the firms;
 - (c) formulation and duration of marketing plans;
 - (d) resourcing of marketing programmes;
 - (c) marketing skills within the individual organisation.
- II to identify a wide range of marketing activities as currently carried out by firms and to determine the most critical and most effective of such programmes with a view to establish distinctive features relating to marketing of construction services;
- III to identify a wide range of marketing objectives as set out by construction firms;
- IV to identify those factors that affect the effectiveness of these marketing activities;
- V to determine relationship between performance on these objectives and those activities by establishing statistical correlation between:
 - (a) marketing activities and performance on the marketing objectives;
 - (b) mediating factors and performance on the marketing objectives;
 - (c) marketing orientation and corporate performance on marketing objectives;
 - (d) marketing profile and performance on marketing objectives;
- VI to develop a model model for evaluation marketing practice

1. 4. 0. The Need and Justification for the Research

The construction industry is involved in many aspects of our daily living; from a purely

utilitarian level of providing shelter, communication infrastructures, to a building as a work of art. The industry also has an important place in the UK economy. Table 1.1 shows the contribution of the construction industry in terms percentage gross domestic product (GDP) and percentage of employees accounted fro by the industry. On the average the its GDP accounts for about 6% of the total UK GDP. On another dimension , as indicated on Table 1.1, the UK construction industry accounts for about 5% of employees in employment on the average.

Table 1.1 Construction Industry and the UK Economy

Year	Gross domestic Output by the Industry as a % UK Total Output	Employees in Employment as a % of UK Total
1981	5.52	4.60
1982	5.91	4.55
1982	6.1	4.72
1984	6.20	4.80
1985	5.90	5.10
1986	6.10	4.80
1987	6.40	4.60
1988	6.99	4.50
1989	7.44	6.70
1990	7.20	6.45
1991	6.62	6.20
1992	6.21	6.40
1993	6.10	6.10
1994	6.23	6.10

Source :C.S.O: Annual Abstract Statistic, 1994. No.130

Construction enterprises devote a large portion of their management time to activities such as finding new markets, evaluating job potentials, establishing contacts with potential clients gaining information regarding market conditions, potential customers and projects, prequalifying with clients, estimating project cost, submitting proposals, entering into contracts,negotiating changes and claims, finally developing new technology or different contract forms. All these according to Arditi and Davis (1988), are marketing activities and do deserve to be systemised to achieve maximum efficiency. Construction industry is a service industry which according to Donnelly (1985), lacks innovative marketing because there is:

- (1) a limited view of marketing;
- (2) a lack of competition in the past; and
- (3) a lack of creative management.

The ability of the construction industry to innovate and manage change has been widely debated over the years (Lansley, 1979; Gale and Fellows, 1990; Betts and Ofori, 1992). A whole range of factors within the environment of the construction firms have changed over the last 20 years in such a way that the combined effect has been for construction firms to move away from their traditional modes of operations, to a more business-like approach (Barrett ,1993).

In order to solve the many new and complex issues which confront management teams in the construction industry, Lansley (1979) suggested the need to develop and demonstrate a wide range of reasoning and problem solving skills. One of the prime requirements , he argued, is to be able to realign limited physical, technical and human resources to meet rapid changes in the construction markets and the preferred procurement methods of clients (Lansley,1979). Such flexibility requires highly innovative and creative problem solving skills as well as organisational structures and managerial value systems which supports and encourage the development of such skills (Peters,1988; David,1991; and Nystrom, 1978).

1.5.0: The Scope of the Research

The limit and scope of this research is considered in three broad areas: geographical scope; type of construction company and; chronology.

1. 5.1. Geographical Scope

The geographical coverage of the research is limited to the United Kingdom because, the UK construction company have been described as lagging behind its counterparts like the Japanese (Gale and Fellows, 1991), the Americans and the Koreans (Arditi and

Gutierrez,1991), at employing aggressive marketing strategies in construction markets. The UK construction industry appears to be out of tune with its European counterparts. It has been described as heading towards the European Single Market '*like a man trapped to a log in a sawmill*' (Contract Journal, April 1989). Secondly, most UK construction companies derived the largest part of their turnover within the UK (Chapter 6).

1. 5. 2. Chronological Scope

A seven-year period (1988 -1994) is adopted for this study based on the following factors:

- (a) The period covered by this research has experienced a severe and prolonged punitive recession. Consequently, the industry experience periods of peaks and troughs in the volume of construction activity (NEDO, 1988; 1991; 1993). A full detail of this is discussed in Chapter 6 (Section 6.5.0)
- (b) This period also coincides with the movement toward single European market and the establishment of Exchange Rate Mechanism (ERM), as a result of which we see an inflow of foreign firms into the UK to develop a base from which to enter into the European Single Market (Gale and Fellows,1990).

1. 5. 3. Sample Groups

The industry comprises six major groups (section 3.3.1; fig. 3.3) each playing a distinctive role in construction process: (a) The client/client organisations; (b) Professionals (advisors); (c) Main contractors; (d) Sub-contractors; (e) Merchants/distributors/plant hirers; (f) Material manufacturers. Full description of each of the groups mentioned above is given in Chapter 3. This research is concerned with with groups (b) and (c).

1. 6. 0. The Research Undertaken

For reasons given above an exploratory approach was adopted for this research, because there was no existing model upon which to develop a methodology for the research. To address these issues, a three part methodology was adopted for the research namely:

literature review; an industry wide survey of contractor and design firms of architects / engineers and provision of a system for evaluating marketing practices within the construction enterprises (See Chapters 2, 7 & 8).

The literature review covers a wide range of issues such as: nature of the construction industry; marketing concepts; management and organisation of marketing function in the industry; resourcing and marketing activities. The literature review was then followed by interviews and preliminary consultation with marketing executives in a number of leading construction firms and a number of academic experts on marketing in construction.

Because of the scope of the research i.e., the geographical coverage, the number of respondents and different groups firms to be considered it was considered that a self-administered postal survey questionnaire will be the best means of primary data collection (Chapter 2, Section 2.2.0). The literature survey and consultations formed the basis for a set of questionnaire. The questionnaire was pretested through a pilot survey of 50 construction firms and companies randomly selected. The objective of this pilot survey was to test for clarity and relevance of the research issues the questionnaire was designed to address.

In designing the survey questionnaire, greater consideration was placed on issues not satisfactorily addressed in the existing literature. These include evaluation of effort and commitment to marketing activities, evaluation of marketing effectiveness, marketing orientation within construction firms, and resourcing of marketing programmes.

Table 1.2 Research Methodology

Phase	Method	Aim
PHASE I (Literature Review)	<ul style="list-style-type: none">- Books and Journals were reviewed- Experts from the industry and academic institutions were consulted	<ul style="list-style-type: none">- To establish firm basis for research and to obtain up to date thoughts on the subject of research.
PHASE II (Pilot Survey)	<ul style="list-style-type: none">- A pilot survey and preliminary interviews of firms and companies in the industry.	<ul style="list-style-type: none">- To pretest the questionnaire for clarity and relevance of issues to be investigated
PHASE III (Main Survey)	<ul style="list-style-type: none">- A self - administered postal survey questionnaire used in pilot survey was fine-tuned and mailed to contractors and firms of architects and engineers	<ul style="list-style-type: none">-To collect data
PHASE IV (Interviews)	<ul style="list-style-type: none">- A follow-up interviews with various groups surveyed	<ul style="list-style-type: none">- To provide an insight to how marketing is managed- To provide psychological explanations for some practices in the industry
PHASE V (Data Analysis)	<ul style="list-style-type: none">- Statistical analysis of data collected using various statistical tools and techniques with the aid of computer packages such as SPSS, MS EXCEL, STATWORKS and STELLA.	<ul style="list-style-type: none">- To evaluate current practices and assess level of the development of marketing function in the industry.
PHASE VI (Model)	<ul style="list-style-type: none">- Establish construct for evaluating marketing practice- tests for reliability of scale, construct validity and correlation tests.- model formulation.	<ul style="list-style-type: none">- To test and evaluate corporate marketing performance.-To develop a standard for marketing performance measurements
PHASE VII (Validation)	<ul style="list-style-type: none">- an independent set of data collected from firms not not included in the first survey. Secondly, the model was applied to five individual firms. A sensitivity analysis was also carried out to test the system	<ul style="list-style-type: none">- To validate and to test for the applicability of the model
PHASE VIII (Case studies)	<ul style="list-style-type: none">- Case studies and interviews	<ul style="list-style-type: none">- For confirmatory explanation of philosophy, process and problems associated with current approach

NB: See Chapter 2 for full detailed description of research methodology

1. 7. 0: The Main Findings

The main findings of the research carried out are summarised below:

1.7.1. Management and Organisation of Marketing

Marketing function like many other management functions in the construction industry lacks proper planning and control. Two third of the respondent do not have formal marketing plans nor monitor their marketing activities. Furthermore, marketing is being managed and organised as a secondary responsibility by either a director or partner as the case may be in addition to other ‘primary’ responsibilities in two out of three firms.

One serious observation from this research is the lack of sufficient use of marketing professionals by the respondents, especially the architectural and civil engineering practices. The contracting firms however perform better in this aspect. The reasons advanced by most architects and engineers is that they are mostly small firms. Surprisingly again, on the alternative engagement of external marketing consultants, none of the professional firms make regular use of marketing consulting services. Four out of five respondents said they have never engaged the services of external marketing consultants. Even among the contractors only one in ten regular use of external marketing consultants.

1.7.2. Marketing Activities

In an attempt to identify a wide range of marketing activities with a view to establish distinctive marketing features relating to construction services , a thorough literature search was conducted. Furthermore, part of the survey questionnaire was devoted to establishing commitment of the firms to these activities. The research identified 16 marketing activities. These are all discussed in detailed in Chapters 2, 5&7.

1.7.3. Marketing Objectives

One of the principal objectives of this research is to identify a wide range of marketing objectives, priority given to these objectives and corporate achievement on these objectives. Objectives are specific results that an organisation seeks to achieve in pursuing its basic mission. The most important ingredient of successful plan implementation is recognition of

the necessity to express plan objectives in quantitative, measurable and objective terms. Hence the research identified 13 marketing objectives, their relative importance and assessed the level of achievement on these objectives by the individual firms

1.7.4. Factors Influencing Marketing Practices

Any attempt to develop procedure for evaluating those factors which influence marketing practices in the construction industry will require that a series of prepositions be established primarily from existing literature. The hypothesis drawn from existing literature were:

- (1) that there is a general lack of commitment on the part of the top management in the industry to the marketing function;
- (2) that marketing is performed on an ad-hoc bases;
- (3) that there is a general lack of marketing skill in the industry;
- (4) there is a lack of understanding of distinctive marketing feature relevant to construction in the industry.

Furthermore, existing literature strongly suggests that the shortcomings of marketing in the UK construction industry is as a result of various factors internal to the industry. These factors have been researched into in general marketing literature and the both theoretical and empirical evidences to show that they determine the effectiveness and efficiency of marketing practice. The effects of factors on marketing results are discussed in Chapters 2 and 8.

1.7.5. Marketing Evaluation System

Currently a comprehensive quantitative model for evaluation of marketing function is not available to assist construction firms in assessing their marketing practices. This thesis presents a quantitative model based on elements of efficiency and effectiveness of marketing practices within the UK construction firms. This model is proposed for auditing corporate marketing performance based on efficiency through effort, marketing orientation, effectiveness of marketing activities and corporate ethical values. Full descriptions of this model and its validation are given in Chapters 8 & 9.

1.8.0. The Significance of the Research

The research undertaken has identified key areas that required urgent attention in order to enhance marketing effectiveness of the British construction firms. They are described below.

- (i) Although marketing is considered a high priority by the top management in the industry, there is lack of practical systems of operating marketing effectively. To address this, a system framework is provided upon which an expert system could be developed in Chapter 10 (This is being recommended for further research work)
- (ii) Currently, there are no existing marketing models by which construction firms can evaluate their marketing performances. From the findings of this research a model has been developed for use by firms to evaluate their marketing position within the industry's scenario.

1.9.0: Organisation of the Thesis

The three parts methodology adopted to achieve the objectives are presented in eleven chapters as described below:

Chapter Two: Research Methodology

This chapter gives a detailed description of the methodology adopted in carrying out this research. The methodology was made up of seven phases as described on Table 1. 2.

Chapter Three: An overview of the UK construction Industry

The work in this chapter give an overview of the UK construction industry. It discusses the characteristics of the industry viz; the physical nature of the product and the method of production; the structure of the industry; determination of demand and competition in the industry; and placing of contracts.

Chapter Four. Aspects of General Marketing Concepts

The chapter discusses the general principles and concepts of marketing, aspects of industrial marketing, aspects of services marketing, organisational buying behaviour and marketing of professional services. The discussions centred on aspects of marketing relating to industrial and services organisations with a view to establish a clearer understanding of services characteristics in order to further explain the attitude of construction organisation towards the marketing function.

Chapter Five: The Marketing Function in the UK Construction Industry

The work in this chapter focuses on the marketing practices in the construction industry. As a background, it reports a literature survey on the marketing function in the construction industry viz; development of marketing in construction; management of the marketing function; philosophy, processes and problems associated with marketing in construction; and current marketing programmes

Chapter Six. Forces Dictating Changes in Attitude to Marketing.

The work in this chapter is a review of current trends in the UK construction industry and their implication for marketing of construction services. The chapter gives a brief overview of concept of change and the general attitude of construction industry to changes. It discusses these changes viz: changes in the industry's structure; fluctuation in the volume of construction orders; changing characteristics of the construction clients; shifts in procurement methods; formation of cross-boarder trading blocks; and developments in technology. Increase in competition resulting from these changes and the implication for marketing of construction services were noted in this chapter.

Chapter Seven: An Evaluation of Marketing in Construction

This chapter discusses the findings of industry wide questionnaire survey and interviews conducted.

Chapter Eight. A Model for Evaluating Marketing in Construction

The work in this chapter focuses on development of fundamental elements attributing to present state of marketing practice in the UK construction industry as observed from the

literature review reported in Chapters 1 to 5 and from the findings of the survey reported in chapter 7. The chapter discusses the procedures for the establishment of the model constructs and the development of the model itself. Finally it presents the model limitations and its applications.

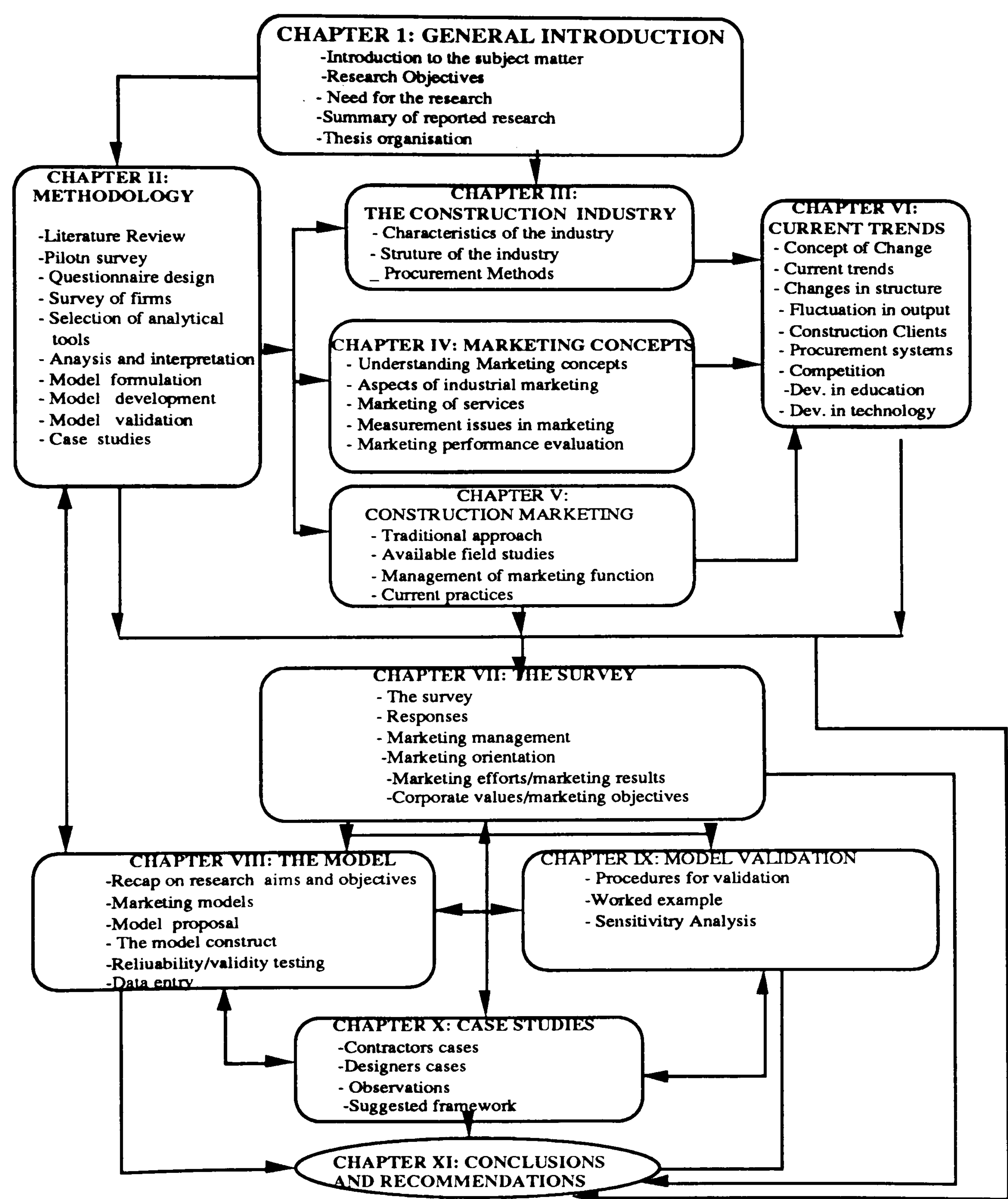


Figure 1.1: A Guide to the thesis

Chapter Nine: Procedures for Validation of the Model

This chapter discusses procedure for the validation of the model developed in Chapter 8.

A three step procedures was followed to test the validity of the model.

Chapter Ten: Case Studies and Interviews

Part of the steps taken to provide psychological explanation to many issues that might arise during the course of the industry - wide survey was to conduct interviews and case studies. In all seven organisations of various sizes and geographical locations were interviewed. These include five contractors and design firms. Finally as part of recommendations arising from the research findings and the case studies a framework for effective marketing practice was proposed with a potential development into an expert system.

Chapter Eleven: Conclusions and Recommendation for Further Works

This chapter summarises the findings of the research and the concluding remarks.

Chapter II
Research Methodology

Chapter Two

Research Methodology

2. 1. 0.: Introduction

Preliminary literature review, as reported in Chapters 1 identified a number of strategic issues relating to marketing of construction services, that need to be addressed. First, it was revealed that marketing was being conducted in an ad-hoc manner within construction enterprises. Secondly, that there is an absence of universal practice and consequently there is lack of distinctive marketing features relevant to construction. Thirdly, no one firm in the industry has overall influence or control over the market or pricing of the industry's products or services and lastly, all the previously reported research and studies have concentrated mainly on the essence and auditing of marketing activities in the industry. None has really attempted to develop means of evaluating individual performance of the marketing function in the context of construction. The primary objective of this research (1.2.0) is to evaluate current marketing strategies and practices in the UK construction industry. Further to this, the research was aimed at developing a model for evaluating marketing practices within construction enterprises.

The concept of marketing adopted in the development of the methodology for this research is that of Hunt et al (1989) and Kohli and Jaworski, 1990). Hunt et al (1989) conceived marketing practice as an attempt by managers with particular skills (relating to organising, allocating, interacting and monitoring), values (relating to priority, mission and orientation) and expectation to achieve specified results. Managers create within an organisational context particular ways of doing things - whether through particular programmes, systems or policies - which collectively represent a structure for guiding marketing action. The organisation in turn, according to Kohli and Jaworski (1990), is located within an environment, with its array of threats, opportunities and constraints, and the link between the organisation and its environment is found via its marketing strategy. of architects and engineers.

2. 2. 0. Method of Data Collection

Various strategies for conducting this research were considered. According to Conant, Smart, and Walker, (1991); and Zikmund (1989), the most commonly used techniques in an exploratory marketing research such as this are: (i) telephone interviews; (ii) person-to-person interview; and (iii) mail survey.

2.2.1 Telephone Interviews

The telephone method is probably the cheapest and quickest technique of the three. It is also more flexible than mail survey and quicker than interviews (Fisher, 1989; Fowler, 1988), but capable of showing interviewer bias. Likely better response rate can be obtained by this method. The main disadvantages with telephone technique are those of questionnaire or measurements constraints, including limits on response alternatives. Getting the person at the time of call could be a problem.

2.2.2 Person-to-person interview

Interviews on one-to-one basis are much more flexible than both telephone and mail survey techniques. It is usually possible to get more information by personal interview than either by telephone or mail. Longer interview can be done in person. Rapport and confidence building are possible. The disadvantages of this method are that it is likely to be more costly; for a large sample covering a large geographical area, total data collection period could be much longer than both telephone and mail techniques. Skill and experience are required in the preparation for and conducting of interviews.

2.2.3 Mail survey

This involves sending the interviewee a questionnaire with a covering explanatory letter. Mail surveys are flexible and inexpensive but have as main disadvantage a low response rate. Mail surveys provide many benefits to marketing researchers. They can be comparatively inexpensive, allow respondent time to answer questions thoughtfully, reach large numbers of geographically dispersed and isolated respondents, and are free from interviewer-bias problems that sometimes plague telephone and personal-interview surveys (Conant et al, 1991). The mail survey technique was adopted for this research because of its many benefits and suitability for the scope of survey and sample size. Firstly the survey was intended to cover a large geographical area i.e. the whole of the

United Kingdom for which this technique is most suitable. Secondly, it is the most convenient of the three methods in terms of time, resources, content and cost.

Non-response bias was a potential area problem with mail survey questionnaire (Fowler, 1988), i.e. a bias that occurs when the final sample differs in a systematic way from the planned sample. There are, however, several ways of dealing with the problem of response bias:

- (i) compare results with known values for the population.
- (ii) subjective estimates - i.e. people who are interested in the subject matter are more likely to respond.
- (iii) extrapolation methods.
- (iv) sampling non-respondents.

The work by Crozier (1982) provides an evidence that non-response bias problem may not be as serious as it has been traditionally stated to be. Crozier concluded from a review of a large number of comparable studies that, although there may be non hard evidence that non-response is necessarily a source of bias in all cases, few researchers would deny that a low return rate nevertheless causes them concern, intuition contradicting the logic of published studies. His view is that it is better to take steps prior to the posting rather attempt to adjust for non-response when the scripts are returned. He suggested the following check list for 'maximising' response:

- (i) respondent orientation - the questionnaire should be made very attractive to the respondent;
- (ii) question content - the nature of the wording should be carefully chosen, and the ease of answering should be of primary consideration;
- (iii) sequence - logical flow of question;
- (iv) presentation - a printed questionnaire that is easy to read;
- (v) the mailing - origin of the research, clear targeting on respondent, persuasive covering letter, return envelope (free-post), incentives;

- (vi) anonymity - for the respondent;
- (vii) follow-up;
- (viii) pretesting and amendment.

To address these issues, a six part methodology was adopted for the research, namely:

- (i) literature review;
- (ii) pilot survey ;
- (iii) an industry wide survey of contractor and design firm;
- (iv) analysis of the survey;
- (v) model development and validation;
- (vi) and interviews/case studies.

2.3.0. Literature Review

The first step taken in the methodology for this research was to conduct a comprehensive literature review on marketing of services in the UK construction industry. The literature review covered a wide range of issues such as:

- (i) nature of the construction industry (Chapter 3);
- (ii) marketing concepts (Chapter 4);
- (iii) management and organisation of marketing in the industry (Chapter 5); and
- (iv) current trends in the UK construction industry (Chapter 6).

The literature review was then followed by interviews and preliminary consultation with marketing executives in three construction firms and a number of academic experts on marketing in construction.

The main set back of the literature review is the paucity of literature relating to this topic, a problem already highlighted by Male and Preece (1994). The main objective of the literature review was to find out what activities constitute marketing in construction firms (see chapter 5), what their marketing objectives are and how they evaluate the marketing

function. It was established from the literature review that marketing is being gradually embraced in the UK construction industry but that there is a general lack of sufficient knowledge of best practice. Because of the scope of the research, i.e., the geographical coverage, the number of respondents and different groups of firms to be considered it was considered that a self-administered postal survey questionnaire was considered the best means of primary data collection. All the above points were taken into consideration during the drafting of the questionnaire and also the covering letter. Feedback on the checklist was sought and questionnaire amended accordingly.

2.4.0 Design of questionnaire

The literature survey on measurement issues in Chapter 5 sought to show how and where marketing performance measures fit into the total scheme of more effective management of the firm. Sloma (1988) said some of the best sources of individual objective measurements in a marketing function is the marketing plan itself. The questionnaire was designed on a fully structured and non-disguised basis, with the aim of obtaining scaled judgments by the respondents on issues relating to the objectives of the research. Included within the structure of the questionnaire, were a number of variables considered to be directly or indirectly related to the operational and strategic characteristics of marketing practices:

- (i) size of the organisation defined by annual turnover and number of employees;
- (ii) skill of marketing staff;
- (iii) use of marketing consultants in developing marketing strategies and programmes;
- (iv) formal marketing planning;
- (v) formal monitoring, control and evaluation of marketing programmes;
- (vi) time frame for marketing planning;
- (vii) expenditure on marketing programmes;
- (viii) corporate ethical values;
- (ix) marketing orientation;
- (x) marketing efforts;

- (xi) effectiveness of marketing programmes;
- (xii) achievements on marketing objectives.

Previous works on marketing research survey techniques notably, Bateson (1988), Parasuraman (1991), and Fowler (1988) were particularly useful in developing the questionnaire. They offer very useful insight to survey questionnaire design. More generally, the questionnaire was kept as simple and short as possible. Fowler (1988) admonishes that if anything, the formatting of a self-administered questionnaire is more important. In contrast to interviewers, respondents do not receive the benefit of training, they usually are not motivated to do the job well, nor selected on the basis of their ability to handle questionnaire.

The literature survey on marketing (see Chapter 4) also provided insights into how marketing and non-marketing orientated companies would differ in terms of perception and, priority given to marketing by the management, management of marketing function and its organisation. Based on these insights, sections A and B of the questionnaire were developed(see Appendix A). Investigation into how the marketing function is perform in each of these organisations; relating marketing objectives to the overall corporate objectives, how these activities are monitored and evaluated, and finally how they relate to company performance are covered in sections C and D of the questionnaire.

The answering technique was such that minimum time was needed, and easy for computer coding. Other points put into consideration in designing the questions include:

- (i) that the terms used will be familiar to the respondents, particularly those terms familiar to the construction industry;
- (ii) that the questions follow a logical sequence;
- (iii) that the questions were not ambiguous and the instructions to the respondents were clear and easy to understand;

The primary objective of the data collection tool was to obtain the respondents' judgment on relationship between company performance on marketing objectives and, marketing

orientation, organisational profile, marketing activities pursued, and to develop a model encapsulating these relationships.

2.5.0 Pilot Survey

Having reviewed current literature on marketing of construction services (Chapters 5) the next objective was to identify the general marketing practices in the industry in line with objectives set out in Chapter 1 (1.3.0) viz: objectives of the marketing function; marketing activities currently employed within construction firms in the industry; level of marketing orientation of firms; and the general performance of construction enterprises on marketing function. The decision as to which variables were relevant and adoptable to construction industry was addressed by conducting a pilot survey to:

- (i) fine-tune the questionnaire, particularly regarding clarity, relevance and content;
- (ii) test the ease at which the questionnaire can be completed;
- (iii) test the applicability of scale and appropriateness of terms and definitions used; and
- (iv) identify variables which will form the set of relevant data for developing the model construct.

The questionnaire was pretested through a pilot survey of 50 construction firms and companies randomly selected. The objective of this pilot survey was to test for clarity and relevance of the research issues the questionnaire was designed to address. Further to the pilot survey, five directors of a leading construction company in the UK were consulted for a review of the questionnaire for relevance, content and clarity. They were:

- (i) Management Information Director;
- (ii) Corporate Marketing Director
- (iii) Marketing Director;
- (iv) Business Development Manager; and
- (v) Project Finance Executive.

Finally copies of the same questionnaire were sent to a set of well known research experts on the topic or closely related topics namely: Professor Norman Fisher, Professor Peter Lansley, Professor Peter Barrett and Professor Richard Morgan. The responses and comment from the pilot survey and consultations helped to ascertain the clarity needed for an indepth understanding of current thoughts on construction marketing. From the literature review, pilot survey and consultations 13 marketing objectives (also known as marketing performance indicators were identified (Table 2.1). Further to this, 16 marketing activities were also compiled for the purpose of this study (Table 2.2).

2. 5.1. Marketing Objectives

These are the performance indicators. The review of literature and studies (See Chapter 5) exposed a distinct problem encountered by all researchers in trying to establish these marketing objectives. While works by the likes of Thune and House (1970), McDonald (1984), Mehrotra (1984), and Borden (1986) suggest performance indicators based only on accounting records. Other writers such as Drucker (1986), Bucklin (1972), Thomas (1984), Chakravarthy (1986) suggested other criteria in addition to accounting systems. After comparing the literature offerings and the pilot survey, it was necessary to trim down the number of indicators to be included in the final questionnaire (See Table 2.1)

2.5.2. Marketing activities

Marketing activities are concerned with aligning an organisation business objectives with those of the client. Essentially, marketing activities is a collective phrase for wide variety of marketing skills ranging from basic product development, and pricing to packaging and servicing and embraces a broad spectrum of elements (Pearce, 1992).

Table 2.1 Marketing Objectives

Marketing objectives	Descriptions
Increase Market share	i.e., the ratio of sales, by a business, in a given time period, to total sales by all competitors in the same market.
Profitability	the ability of a company to make profit.
Return on investment	i.e. ratio of income to investment.
Competitiveness	Ability to demonstrate differential advantage over the competitors in the minds of the target audience.
Quality assurance	i.e., the quality of each participating company's offerings, appraised in terms of the percentage of sale of product from each business, in each year, which were superior to those competitors.
Market penetration	The targeting concept in marketing is central to success. The better the firm matches its strength to the perceived needs of the most appropriate segment, the more successful it is likely to be.
Innovation	this is primarily in terms of the development of new products and services. Innovation can be viewed in two ways: how well does the company innovate relative to its competitors and how quickly does it innovate?
Productivity	Productivity is the real value added of a company's output divided by the amount of capital , materials, labour the company uses
Cost effectiveness	Marketing is about effective alignment of organisation's resources to satisfy the customers needs and making acceptable profit.
Client loyalty	Customer satisfaction must always be the objective of the firms executives this ensures competitive advantage.
Increase Turnover	Firms need a growth perspective and it it critical that executives manage growth effectively.
Improved corporate image	It is important to have an accurate assessment of public or prospective clients' image of the firm, with a view to improve on the clients perception.
Improve bidding success rate	In an industry where competitive bidding is predominant method of job procurement, marketing efforts should be directed at improve an organisation's chances of winning contract bids

Table 2.2: Marketing Activities

Marketing Activities	Descriptions and Applications Firms' Activities
Advertising	- concerned with promoting the image and the capability of the firm to potential clients and encouraging existing clients to continue.
Public relations	- helps in building up business and developing contacts with potential clients.
Personal selling	- considered to be the most important among construction marketers for the purpose of building up lasting business relationships.
Market Research	- essential for establishing the size and structure of the market and collection of information on the industry.
Exhibitions at conferences and promotional videos	- very useful at promoting successes and the capabilities of firm especially with the aim of attracting potential clients.
Corporate Identity programmes	- primarily to promote the firms
Sponsorships of events	- aimed at establishing a firms presence in the community.
Acquisition/Mergers	- a form of strategic alliance necessary for competitiveness and market penetration.
Charitable donations	- helps the firm at identifying with the needs of the community.
Joint ventures advantage	- a strategy for technical, financial and competitive for firm desiring to increase their strength and capability.
Pre-project proposals	- industrial marketing strategy embodying innovative and creative responses and presentation aimed at ensuring greater competitiveness especially with established clients.
Use of information services	- developing information data base on clients and other competitors and the firms position relative to others.
Alternative proposals	- providing the client with quality choice and value for money during interviews and presentations.
Additional services	- a marketing strategy aimed at enhancing mutual commitment by taking up other responsibilities relating to, but outside the contract.
Discount offers	- this is not only a negotiating tool but has helped in enhancing loyalty between the firms and the clients.

2.5.3. Strategic issues

In addition to establishing of marketing objectives and the identification of a number of marketing activities a number of strategic issues were also considered at the on set of this research as part of wider objectives (section 1.2.0). This issues include marketing planning, control, time frame for marketing plans, skills, management still, organisation of the marketing function, marketing orientation , efforts and a host of other strategic issues, all of which are addressed in the final questionnaire.

2.6.0. The Final Survey

Having identified the marketing activities and their objectives, a questionnaire for industry-wide survey was structured in accordance with the aims and objectives of the research. This was to enable tests of performance based upon the responses of the respondent companies.

2. 6.1. Sample Frame and sampling Method

Having decided the methodology, the next step was the establishment of criteria for sample selection in terms of size of sample, geographical area of coverage, range of activities of firms, and size of firms in terms of turnover and number of employees. This was intended to deviate from the common attitude of most researchers in the past who often concentrate research in most cases on the top 50 construction companies. In this research it was considered that in order to obtain a comprehensive feedback on the subject it was necessary to use a sample that is a true representative of all categories of contractors and design firms in terms of geographical spread, size and age. Hence a random selection of respondents was carried out to include:

- 150 Building and Civil engineering contracting companies, drawn up to include the top 100 companies in the UK as listed in *Contractors File (1993)*, a joint publication of Institute of Civil Engineers and Chartered Institute of Building, Business directories, Construction Contract journals and Building Employers Confederation Directory;

- 150 Architectural consulting firms, drawn from Royal Institute of British Architects Directory of Practice 1992;
- 150 Civil/structural engineering consulting firms obtained from Association of Consulting Engineers.

The questionnaires were sent directly to individuals responsible for managing the marketing function within each of the firms and, where there is no such a person, it was sent to the managing director or a principal partner as the case may be. This was followed by reminders through letters and telephone calls.

2. 7.0. Method of Analysis

Due to the exploratory nature of this research, it was required that the data be analysed with the objectives of the research in mind. The information needs of the research, having been translated into types of data, require appropriate manipulation to address these needs. It was decided to use an unbalanced itemised scale which was pretested in the pilot survey. These variables were coded into a computer package (SPSS). One of the objectives of this research was to determine if there are any relationship between firms achievements on marketing objectives and a number of variables listed above. To achieve this, a series of statistical tests and analysis using various statistical techniques and computer packages namely: SPSS, and STATWORKS, were employed. Some of the techniques are described in detailed in Chapter 8 and Appendix F. They include:

- (i) reliability of scale alpha;
- (ii) construct validity test;
- (iii) correlation test between all the variables;
- (iv) simple regression to estimate strength of relationship;
- (v) discriminants analysis to predict group membership of several variables;
- (vi) sensitivity analysis.

2.7.1. Method of Sorting out Samples

The construction industry's fragmentation is well known (Chapter 1). In sorting out the sample, the respondents were categorised into three distinctive groups - architects,

Civil/structural engineers and contractors. The idea was to investigate if there is any distinguishable peculiarity in approaches to marketing by each of these three groups.

2.7.2. Measurements and Meaning of Variables

The constructs are made up both single-item scale and multiple-item scale (Table 8.1). The overall attitude scores generated in both cases were interval-scaled, and are capable of offering clues about the respondents' overall views towards and object. They are, however, rather crude measures. In using, evaluating, or developing multi-item scale measures, a number of guideline and procedures to help ensure that the measure is as psychometrically sound as possible have been recommended (see, Churchill, 1979; Nunnally, 1979; American Psychological Association, 1985) and they include: construct definition and domain; content reliability; and construct validity (See Chapter 8 for full detail discussion).

2. 8. 0 Model Development

In developing the construct for this model, attention has been concentrated upon the fundamental elements necessary for assessing quality of an organisation's marketing practices based on achievement of organisations' marketing objectives (see Chapter 8). Figure 2. 1 a is diagrammatic representation of the procedures for the model development.

The assumption of this procedure is that every business enterprise has an established corporate mission. From the established mission the principle of management by objectives (Etzel and Ivancevich, 1974) is employed to establish marketing objectives. In this research these objectives were established through pilot survey. From the these objectives 13 critical objectives were selected.

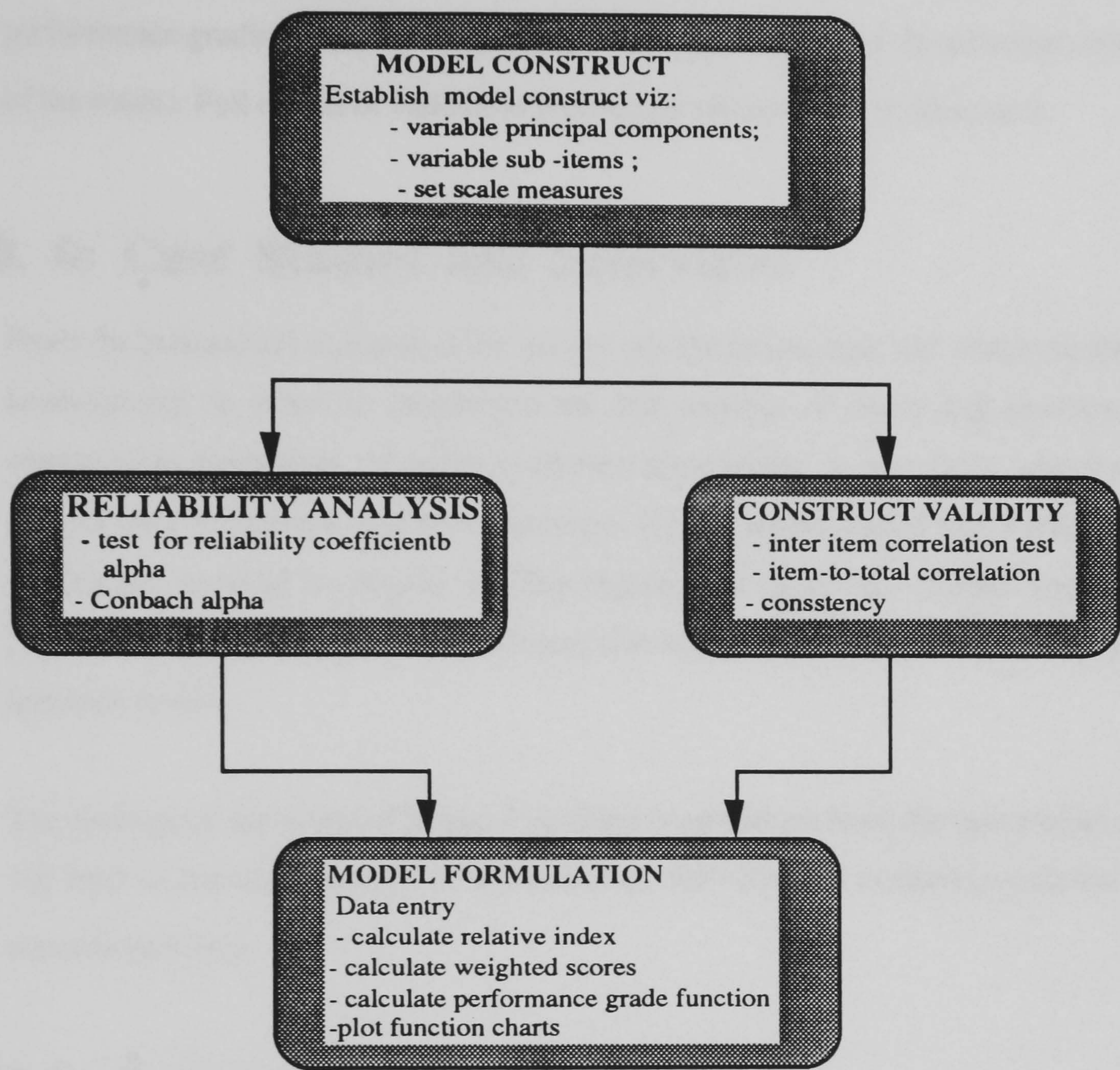


Figure 2.1: Procedures for model development

2. 9.0. Model Validation

A simple procedure was adopted for the validation of this model. Recall from section 6.3.4 that a self-administered questionnaire was posted to 450 construction firms and that of the 115 returned, 105 were analysed and used for the development of this model. Validation of this model was performed in three stages. First, a set of 100 of the same questionnaire used in the previous survey was dispatched to firms which were not included in the original list. Out of the 100 firms targeted, 30 responded. Analysis for validation was carried out on 30 responses (30%) following the same procedure as in the case of model. Secondly, the model was tested on five individual firms to demonstrate the applicability of the model. The third procedure was sensitivity analysis to examine the response of

performance grading function with respect to changes in each of the principal components of the model. Full details of validation procedures are presented in Chapter 9.

2. 10. 0: Case Studies and Interviews

From the preliminary analysis of the survey, several issues emerged which needed proper investigation in order to understand the full concept of marketing practices within construction enterprises. In order to address these issues, a case study was designed in two formats: (1) person-to-person interview; (2) self administered mail survey. The case studies are reported in chapter 10. The objective of these case studies was to provide psychological explanation to many issues that might arise from the main survey and the literature review.

The findings of the survey (Chapter 7) and the observations from the case studies (Chapter 10) lead to the development of a framework for effective marketing practices within construction firms.

2.11.0. Summary

The methodology adopted for this research involved a comprehensive literature review a pilot survey to fine tune the research questionnaire, an industry wide survey of contractors and professional firms, case studies and development of a model for evaluating marketing practices in construction organisations.

A methods of self-administered postal survey questionnaire was adopted for the main survey because of its convenience and economic advantages over other methods.

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Chapter III
The UK Construction Industry:It’s Structure and Characteristics

Chapter Three

The UK construction industry

3. 1. 0. : Introduction

In Chapter 1, it was stated that the motivation behind this research stems from current notion that marketing is a less well developed management function in the UK construction industry and that there is a general lack of enthusiasm towards its full integration with other management functions within construction enterprises. In order to understand some of the explanations behind this attitude an overview of the UK construction industry its composition, characteristics, production process, physical nature of its products, procurement methods, and education and training is presented in this chapter.

3.1.1 Classification

The Standard Industrial Classification Act of 1968 classified construction industry as that involved in, erecting and repairing buildings of all types,(constructing and repairing roads and bridges, erecting steel and reinforced concrete structures, other civil engineering works such as sewers, gas or water mains, aerial masts, open cast mining, building and civil engineering establishments of government departments, local governments, town corporations and commissions, inclusive.

Malcolm Hislop (Brech:1975), defined the construction industry as: building and civil engineering industries comprising firms engaged wholly or mainly in construction, alteration, repairs and maintenance of buildings of all types, highways, airfields,sewers, water works, harbour, and canals, the erection of structural steel works, electric wiring, heating installation and other installation works.

3.1.2 Composition

The larger contracting and subcontracting firms have professional staff of various specialities such as ,architects, engineers, surveyors, lawyers and accountants, who have acquired special experience in dealing with construction projects from various aspects. The construction industry consists of private and public enterprises which have become interlocked as a result of changing pattern of demand. These firms, according to Brech (1975), are closely bound together by economic forces and reliance on each other's method. The structure is non hierarchal, which sometimes results in the intermittent debate on who should be the leader. Control organs do, however, exist providing management services to various parts of the industry and are essentially representative and protective bodies and do not exercise managerial functions (Hillebrandt,1974; Huru, 1992). Because of its special nature and complexity, we shall considered the following key areas in reviewing the nature of the construction industry:

- (i) the characteristics of the industry;
- (ii) the structure of the industry;
- (iii) trends in the industry;
- (iv) construction client.

3. 2. 0: Characteristics of the industry

The construction industry has unique characteristics which are related its structure, production process, physical characteristics, and composition. Those characteristics go a long way to explain methods of production, and organisation, price determination, payment methods, financial decision making and control, and an industrial structure unlike those met in other sectors. Hence, the construction process generates management problems and opportunities at the level of the firm which may differ in scope, scale, time and the type of appropriate solutions from those met in firms in other industries. Hillebrandt (1985), suggested that these characteristics fall into four main groups:

- (i) the physical nature of the product;

- (ii) method of production;
- (iii) the structure of the industry including the relationship between the main groups in the industry and their interaction in the construction process;
- (iv) determinants of demand, why clients invest in building and construction services;
- (v) methods of price determination, i.e., tendering and competitive bidding.

3. 2. 1: The Physical Nature of the Products

The products of the industry have well-known characteristics which, according to Hillebrandt and Cannon (1989), differentiate them strongly from most other industries. Their location is fixed, their geographical distribution widespread, they are large, heavy, one-off and custom-built, generally long life and expensive. Because of the nature of the products, their production process does not lend itself to the use of capital intensive methods. Hence the industry is labour intensive. In addition, the fact that the demand for any type of product is not continuous in time or place, and that different inputs are required over the life of the project, leads to great difficulties in the long term employment of manpower.

The final products are required over a large area with a large parts of the components manufactured elsewhere by other industries. Construction products are “*custom-built*” to a unique specification and are, in many cases, investment goods in the sense that they are generally required to produce a flow of production of goods or services or amenities over a long period of time. For instance, a factory, as a means for further production; roads, as infrastructures of the economy, either to provide access or improvement for communication and distribution of goods and services; hospitals , could be seem as social investments, providing infrastructure for health care; housing, providing direct shelter for people.

3. 2. 2: Method of production

The production process in construction industry is long and involves a large number of separate organisations contributing to different stages of the production process. The major

stages of a project together with various aspects considered at each stage, form the construction process (Figure 3.1).

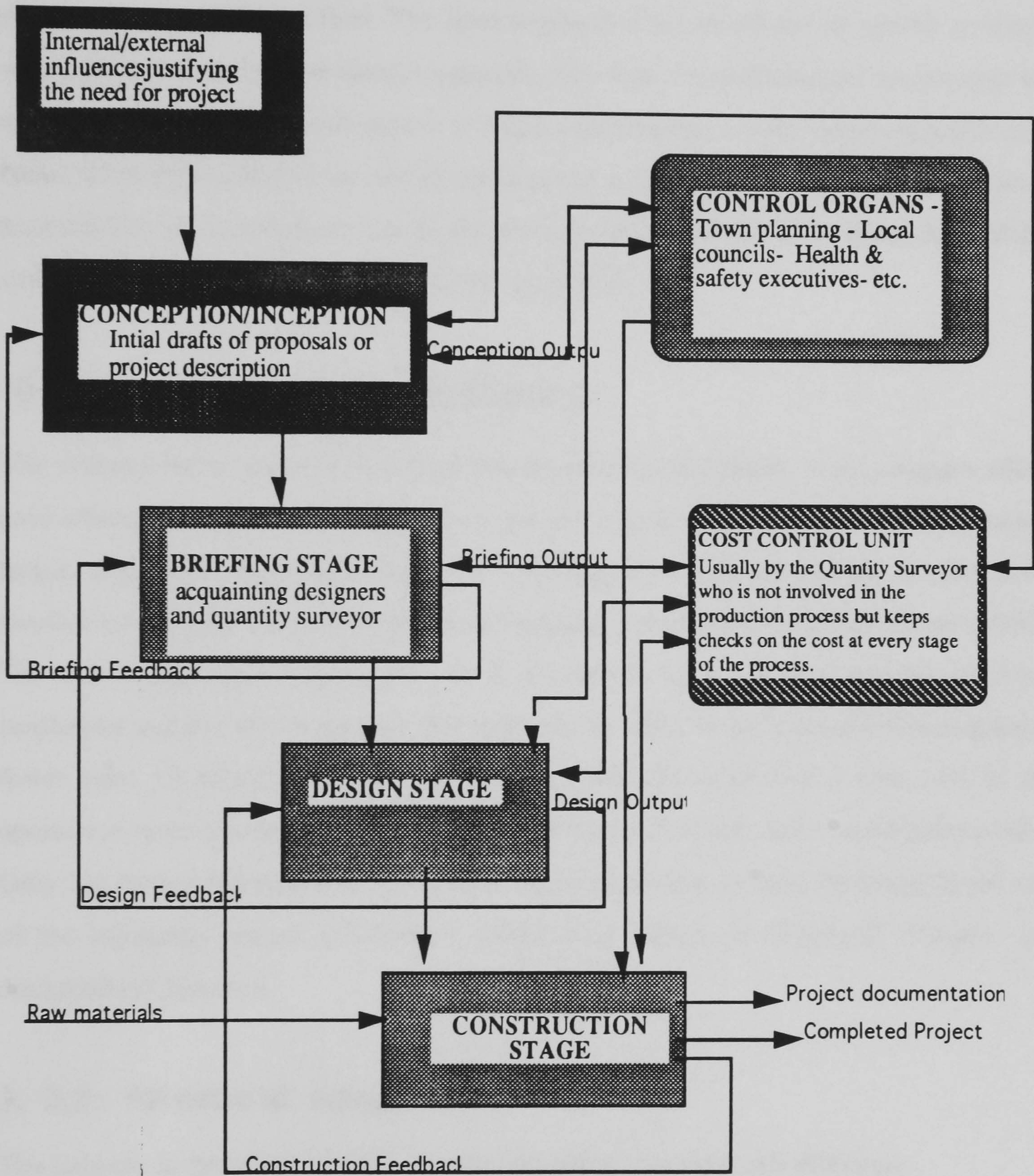


Figure 3. 1: Simplified Model of Traditional Process

Source: Gardiner and Simmons (1992). Analysis of conflict and change in construction projects. *Construction Management and Economics*, 1992, 10, 459 - 478.

The process starts from conception by the client, to design stage by a consultant or designer. Pricing and costing is carried out by the Quantity Surveyor, who in most cases operates from a different firm. The final production is carried out on site by contractor, who may, and does in most cases, engage the services of subcontractors to carry out some specialised works. The involvement of many organisations in one project provides strong bases for conflicts during the construction process largely due to, domain of consensus, accessibility of information, interdependency of tasks, individual performance (Mohsini and Davidson, 1992; Gardiner and Simmons, 1992).

3. 3. 0: Structure of the Industry

The industry has a complex structural characteristics and despite many changes which have affected the construction industry in the past two decades its structure has remained largely unaltered, with a small number of very large firms and vast number of small firms swollen recently by the move towards self-employment (Hillebrandt and Cannon:1990). The industry is very fragmented and is dominated by a growing number of small employers and the self-employed. For example in 1990, 96 per cent of firms employed fewer than 13 people and there were about 201,486 small firms. One half of the operatives were self-employed and there were about 718,000 self-employed workers. Only 116 firms employed over 600 people but these firms accounted for about 26 per cent of the industries output (Callender, 1993). Full details of structural changes are discussed in Chapter 6

3. 3.1: Structural composition

The industry is classified ¹(¹ SIC) into the following structural sub-divisions:

- (i) general construction and demolition work;
- (ii) construction and repair of buildings;

¹ Standard Industrial Classification Act of 1968.

- (iii) civil engineering;
- (iv) installations of fixtures and fitting;
- (v) building completion work.

The activities of the industry cover a very wide range of processes from simple house production to the construction of power stations and large civil engineering projects. But perhaps the best description of the structure of the industry is Figure 3.2, (Hardy and Davies, 1984) showing the structure and communication channels between the various participants in the traditional construction process.

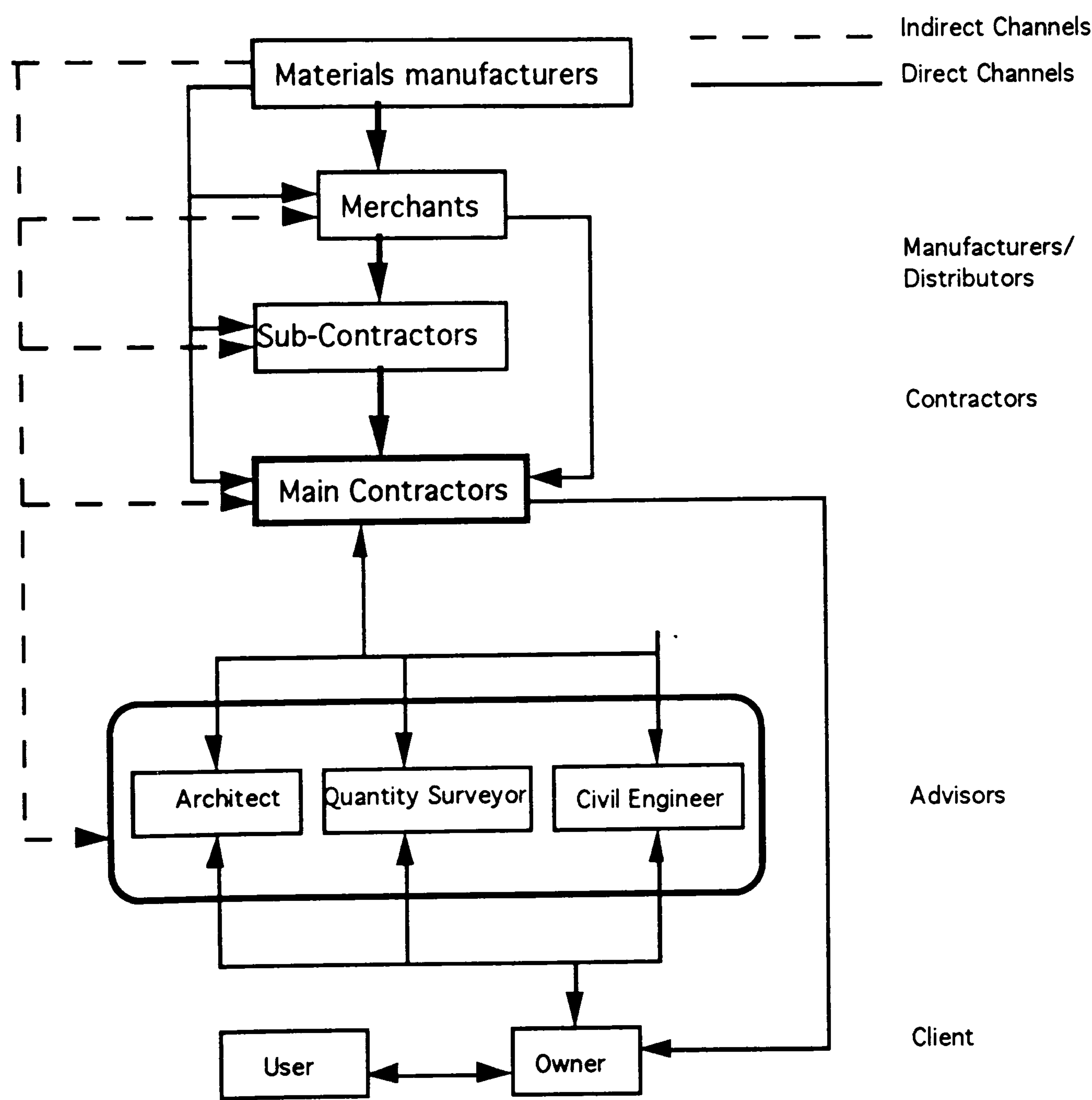


Figure 3.2: The Structure and Communication Channel in the Construction Industry.
Source: Hardy and Davies, (1984). Marketing of services in the UK construction industry

The industry is made up of four distinctive participants in construction process: the clients; advisors (architects, engineers, quantity surveyors, town planners); contractors (including sub contractors); merchants (manufacturers, distributors, suppliers). Huru (1992) also gives a very exhaustive description of composition of parties involved in construction process and their responsibilities.

3. 4 0: Determinants of demand

One enduring characteristics of the construction industry is variability of demand (Hillebrandt and Cannon 1990, Shutt 1988, NEDO, 1993). A detailed discussion on the fluctuating nature of construction output will be presented in chapter 5 (Section 5.5.0). This variability of demand in many ways shapes the nature of the industry and the enterprises which operate within it (Langford and Male, 1992). Demand is regarded by economists as the requirement for goods and services that the customer is able and willing to pay for. The determination of demand for construction is a very complex process, partly due to the characteristics of the products of the industry, especially their size and high cost, their long life, the investment nature of the products, and the complexity of the process. There are five major requirements that must be favoured before demand can be created:

- (i) that there is a user or potential user for the building or works in the short run or in the long run;
- (ii) that some person or organisation is prepared to own the building or works;
- (iii) that a person or organisation is prepared to provide finance for the construction of the product and for its ultimate ownership;
- (iv) that some person or organisation is prepared to initiate the process;
- (v) that the environment and the external conditions in which the requirement above operate are favourable.

There are thus potentially four persons or institutions involved: the user, the owner, the financier and the initiator and to these one might add the government (See figure 3.3). The

government in one form or another has a substantial influence on the environment in which demand creation must take place. The government is the major customer and also influences private sector demand through interest rates. The '*multiplier*' and '*accelerator*' effects are particularly noticeable in the industry and their impact is heightened by the large unit value of the projects.

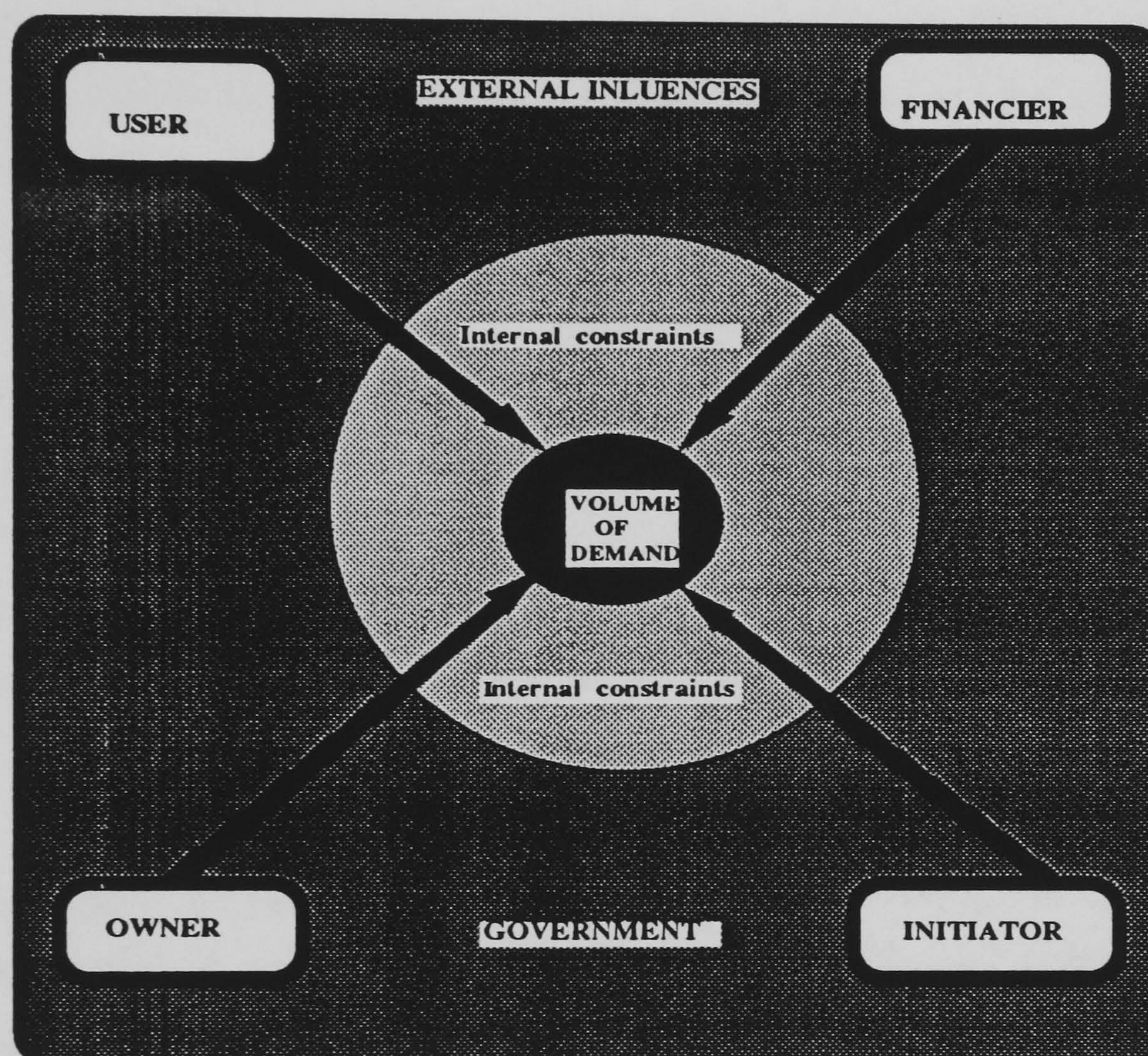


Figure 3.3: Favourable requirements for demand. for construction services

Private sector demand for the industry's products is complex. First, the value of the product tends to be high in relation to the client's income and utility must thus be derived over a long period of time. Such purchase decision represents capital investment and must be tempered by interest rates, the entrepreneur's perception of future demand for his products, and the relative return from competing areas of investment. Secondly, during times of high inflation property has been generally considered as an inflation proof investment. Thirdly, the client and the user are often distinct e.g. a property developer is the construction industry's client

but he will not be the user. Lastly, other than private housing, the demand for building is a ‘*derived*’ demand, based on other needs and wants of the client.

3.5.0: Method of Price Determination

The physical nature of construction products, its diversity, complexity, geographical spread of demand, and fluctuation in demand have moulded the structure of the industry. Consequently, the method of price determination is a discrete process for each project and for each piece of work subcontracted either by tendering or other forms of negotiation. Flanagan and Norman (1989), lamented on a ‘*deliberately narrow way*’ in which the construction industry is concerned solely with price determination of a complete project rather than that of the individual components or elements of the building. and added that simple economic propositions on price determination do not apply in the construction industry. Perfectly competitive conditions are conspicuous by their absence; oligopoly (contestable) or monopoly are much more relevant market structures. Risk and uncertainty are endemic both in the projection of work load (demand) and of cost (supply).

The competitive processes by which building projects are awarded are price guided, but in ways that generally are not treated in the simple economics textbooks. Competitive tendering and negotiated tenders, according to Hancock (1990), are rarely considered in economic analysis of ‘the price system’. This, he added, does not mean to say that price determination in the building industry is somehow ‘outside’ economics. What it does imply is that rather more complicated models are needed that take explicit account of the imperfectly competitive environment in which clients and contractors operate.

The most usual method of price determination in the UK construction industry is through some form of tendering and competitive bidding and in some cases through negotiation. There is however a variety of pricing systems in the UK construction industry, which are related in the main to the contractual arrangements made between the client and the contractors (Table 3.1). So far as price determination is concerned, two distinguishing features of these contractual arrangements are important:

- (1) the selection and number of contractors competing for the particular project;
- (2) whether the initial quoted price can be negotiated between client and contractor prior to the final award of the contract.

A review of literature and experience on competition have shown within the UK construction industry, that price is the predominant element of competition. The substance of competitive bidding is that firms decide on what the market will bear, i.e., the maximum price that client will accept, hence the firm takes the pain to consider the price which they are confident will win the contract (Hancock, 1990). This point was re-echoed by Langford and Fellows (1993) who observed that contract price still remains the single most important factor in determining the obtaining of work. This principle of competitive bidding, according to Hancock (1990), is based on the theory of perfect competition which consists of the following parameters:

- (i) that there is low degree of both buyers and sellers;
- (ii) that there are no barrier to entry for new participants and availability of perfect market information for all;
- (iii) that there are no products and/ or services differentiation that gives an individual organisation a characteristic that is not shared by other competitors.

Since the mid 1980's to date, however, there has been a continuous growth in the industry in terms of new entrants and new challenges from foreign competitors, there has also been a persistent fluctuation in the volume of demand for construction services as a result of the economic climate and worldwide recession. (NEDO, 1988; 1991; 1993). And while one may argue that there is no entry barrier into the industry, the truth is that clients and/ or their advisors keep a selected list of contractors which they invite to tender who in most cases are local to the client community thereby making entry difficult to 'intruding' organisations

(Moore:1984, Pearce, 1992).

Furthermore individual firms are too small to influence market price effectively and overall market conditions determine the general price of product and services and that by and large, it could be said that services do differ from goods as objects of marketing. Services are activities, not things, although physical goods or things may be needed either to support or facilitate service consumption. Service is produced in a process which simultaneously is the service. Therefore, services cannot be treated like goods in a market planning context. A service marketing context is needed.

Table 3.1: Different forms of contractual arrangements:

Contractual arrangements		Descriptions
1	Design-Build	(package deal, turnkey)
2	Design-Bid	with contractor completing part of the design-build.
3	Lump sum fixed price	
4	Lump sum fluctuating price	
5	Schedule of rates,	remeasured on completion
6	Management fee contracting	with guaranteed maximum price and fixed management fee
7	Management fee contracting	with a target price and a fixed management fee
8	Management fee contracting	with a target price and fluctuating management fee
9	Cost Reimbursement	
10	Construction management	with separate trade contracts (contractor or professional consultant) with trade bid upon a fixed lump sum.
11	Construction management	with separate trade contracts, with trades on cost reimbursement.

Source: Hillebrandt and Cannon (1990), *The Modern Construction Firms* , MacMillan

3. 6. 0: The construction client

A key variable in the delivery of construction services is the activity of the client. The involvement, mode of involvement, expectation and the use of the service/product influence the client’s perception of quality that shapes his perception of value for money or satisfaction. Construction client can be defined as, people or organisations with needs to be satisfied, who have the necessary supporting finance available, and with the level of

commitment necessary to spend money in satisfying those needs (Fisher, 1989).

Higgins and Jessop (1965) categorised clients into two groups, sophisticated and naive, and suggested that the naive clients's initial move for advice is made from a point of some ignorance and whatever his or her decision, it will have significant effect upon the nature of the building team that follows. It has been suggested that the inexperienced clients will be considerably influenced in their choice of method by their first point of contact with the industry (NEDO,1978 ; NEDO,1988). Newman et al (1981) have also attempted to classify clients into various sectors, namely: once in a lifetime/inexperienced; regular/repeat; experts; and special.

In general, the clients are classified primarily as public or private (Dolan, 1979; Hillebrandt, 1984; Friedman, 1984). Others have extended this classification to concentrate on their primary business functions such as individuals, charitable trusts and foundations, property developers and hospitals (Langford and Fellows, 1993).

3.6.1.The public Client

The largest single employer of the nation's construction industry is the central government. Using its many departments and agencies as a guide and control, it dominates the economic viability of the building services and thereby exercises a decisive influence on both its progress and prosperity (Dolan ,1979; Fisher, 1989; and Pearce, 1992). The government buys through central government departments, local governments, public utility corporations and hospital boards. While in most industries the customer selects and pay for one or more products/services on offer, in construction industry, the customer (client) is often involved in determining the design, price, timing of production, and location of the project, and sometimes, the project is designed to order and specification from the client.

The client appoints his principal designer or a consultant who becomes his main adviser. The choice of the consultant/designer depends on the type of project, i.e., whether it is a building project or civil engineering. For example, in the case of a building project, the

designer/ consultant would be an architect. Industrial projects may require a consulting firm with speciality in the nature and purpose of the project. The client usually briefs the consultant/designer on what he wants, and various aspect of the proposed project, ranging from available finances to the project location and where it is required for use.

In large public sector, it is possible that the client has an '*in-house design team*' possibly a construction team to carry out construction works through *direct labour*, usually maintenance and renovation works. Many large clients like public authorities employ their full time professionals. These professionals are often involved in commissioning private contractors on the clients' behave where the quantity of work exceeds their capacity. they often act as clients' representatives. This practice is very common in government establishments. The public clients include; central government; local government; town councils; public utility corporations; hospital boards and schools.

The public client has become increasingly important customer for construction works. The public client's demands are well coordinated and provide more than half of industry's workload (NEDO, 1988; 1991; 1993). As a result of this, the public client influences the efficiency of the industry by the manner in which contracts are administered, and to exercise influence on quality and productivity of the construction industry. For example, in civil engineering projects, the government as a major client, uses its position to maintain markets for contractors and material manufacturers by investing in efficient construction method and maintaining a selected list of contractors eligible in tendering for new jobs.

3. 6. 2.The Private Client

This sector of the construction market purchases on the basis of derived demand. It is also referred to as *non-housing private market*. The private sector share of new construction work has been growing throughout the 1980s(See Chapter 6). Although there are no accurate statistical classification of the private sector clients, their construction requirements are grouped into three broad divisions:

- (i) industrial buildings;
- (ii) commercial buildings; and
- (iii) private housing.

3.6.2.1. Industrial Buildings

Industrial buildings, e.g., factories, and warehouses are required for production of some goods. The demand for an industrial building is created by demand for products, or development of new process that can be housed in the building.

3.6.2.2. Commercial Building

Commercial buildings are made up of offices and shops. The users are companies, partners, and individuals undertaking business enterprises. The demands for industrial and commercial buildings are due to either technological changes or development of new products .

3.6.2.3. Property Developer (Private Housing)

The initiators of private housing construction are developers, who buy, plan the site, obtain planning permission, organise the construction and sell them to new owners. Property development has, to some extent, a speculative role. Within each of these groups, there are varying degrees of knowledge and understanding of building process. The Burt report (1978) noted that some (clients) have only a vague idea of what they need and who can provide it; some have a precise idea of operational needs but are inexperienced in commissioning work, and some, such as local authorities, may have clear ideas and access to resources but are uncertain how best to deploy them.

The client, therefore, requires advice and guidance in using the industry. They require the services of professionals to provide consulting services. For example, in a case of a building project, the architect is normally selected first and will, on occasion, recommend the quantity surveyor. Together they will appraise the client's building requirements and establish a 'design brief' and alternative methods of satisfying this brief.

3.7.0. The placing of contracts

The construction industry shares , with many other industries, the competitive bidding or tender method of placing contracts. However, the nature of the construction industry's product, including complexity and scale and the importance of specialist professionals in the pre-contract stage, has led to a development of several other methods of placing contract , distinct from the simple tender system. The contractual arrangement adopted determines not only the relationship of the various design, construction, and advisory organisations with the client but also their relationships with each other. For example, according to Nahapiet and Nahapiet (1985), it establishes the stage at which each is to be involved in the project, the lines of communication and responsibilities of information provision and the pattern of coordination and control.

The process by which the client decides to erect a building or undertake a civil engineering project actually ensures that it will get built varies according to the size of and type of work, the tradition of the country of the client, the type of client and his perceived needs. First we shall look at the traditional method.

3. 7. 1. Traditional Procurement

In the traditional process the design is separated from construction. The client makes separate contracts for services with consultants taking part in the design and for construction with the main contractor. The main contractor in turn enters into contracts with his own sub-contractors and nominated subcontractors selected by the clients (See Figure 3. 4). In the traditional procurement method, extremely low tenders may be submitted in order to win a project. Sometimes profit is brought in only through claims.

The Banwell report (1965) received much critical praise because it argued that letting contracts on purely lowest cost basis, without considering value for money, was illogical. Tenders, Banwell argued, should be restricted to firms that are seen to be able and suitable to carry out the work, i.e. 'selective tendering' as opposed to 'open tendering'. Banwell

also felt that clients and professionals should be more receptive to alternative construction ideas from contractors, at tender stage, instead of being dismissed as ‘unfair’ to other bidders. The report went as far as suggesting that tendering competition can be further limited or even eliminated and that other methods of placing contracts can be used. The report felt that such systems as negotiated contracts, could offer the client significant advantages and urged that public sector should not dismiss such system because of the need for ‘public accountability’, i.e. the belief that ‘maximum’ competition should produce the lowest price and provide the best use of public funds.

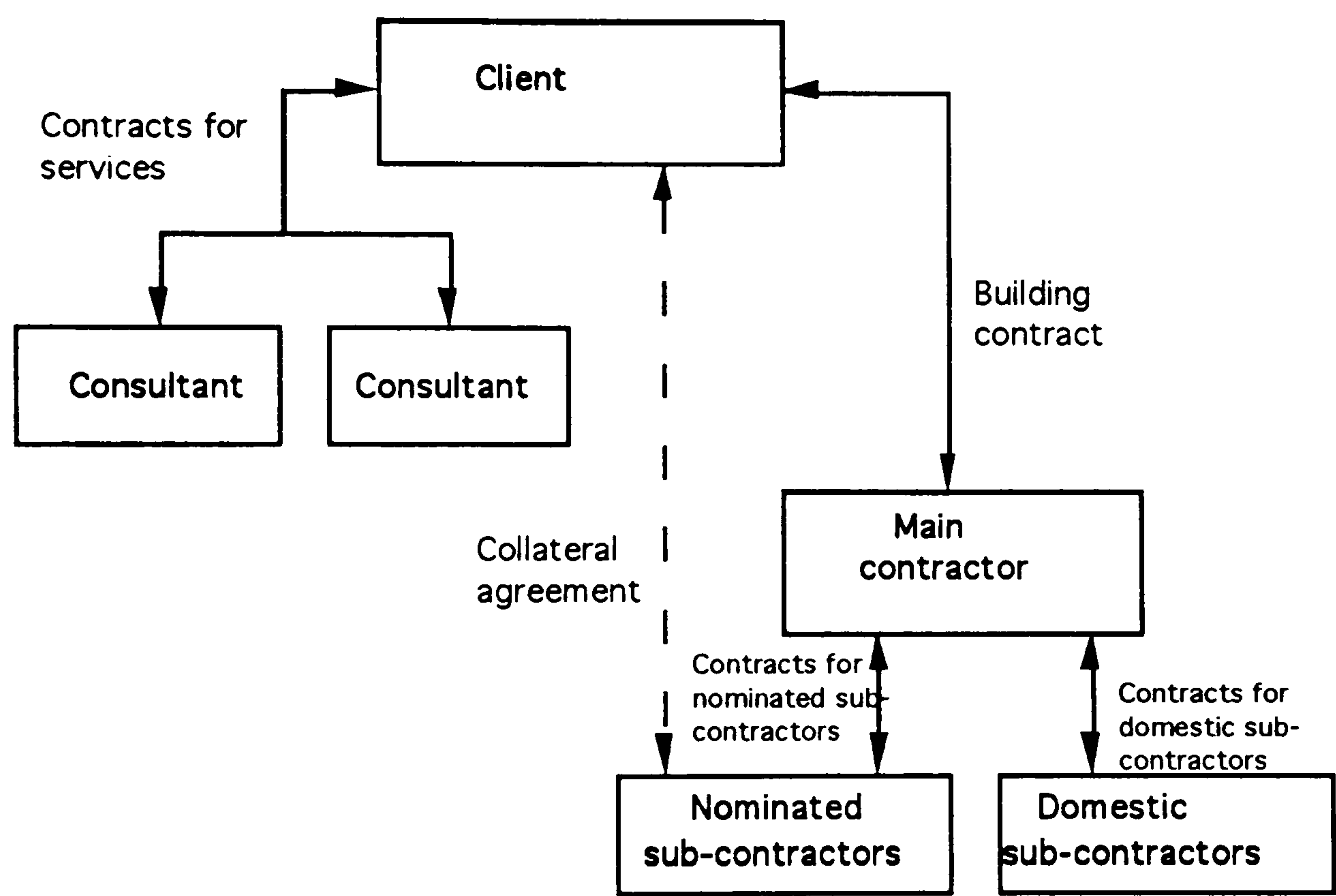


Figure 3.4. Contractual relationships between parties in traditional procurement

Thirty years on, Langford and Fellows (1993), Langdon and Everest (1994), and Lathan Report (1994) all observed that this method still remains the most dominant procurement method of construction services. (See chapter 6 for more details). According to Nahapiet and Nahapiet (1985), the main benefits which drive the clients (especially the public client) to give preference to this method are:

- (i) that it is simple and familiar and therefore relatively well understood;

- (ii) that it establishes a well-defined set of relationships and responsibilities at each stage of the project;
- (iii) that it offers greater price certainty to the client because contractors bid fixed prices on the basis of detailed plans.

At the same time they argued that traditional method have several major limitations. Notable among those frequently cited were:

- (i) the length of time taken to deliver projects because of the need to complete all design work before letting the construction contracts;
- (ii) the loss of savings potentially available through earlier involvement of the contractor;
- (iii) the higher probability of adverse relationships being established between various parties, especially in projects which undergo a large number of changes; and
- (iv) the generally lower level of flexibility involved, especially, by comparison with other forms of contract.

Having agreed a price for building to a defined specification, any variations from this specification are subject to renegotiation between the parties. This process can be time consuming and may delay progress on a project, sometimes creating a conflict of interest between those involved. Although This method provides cost security in times of inflation, this extension of time may result in higher bid prices and thus higher overall project costs;

3. 7. 2. Design and Build

Here, the contractor offers a full service including that of the architect/engineer and quantity surveyor. This, according to Bennett (1991), is perhaps the simplest and most obvious way of overcoming the divisive fragmentation of British building industry. The growing importance of this approach was marked in 1981 by the publication by the Joint Contract Tribunal (JCT) of a standard form of contract for this procurement method, The JCT Standard Form of Building Contract with Contractors Design (Nahapiet and Nahapiet, 1985). The design and build approach works well where the customer can clearly specify his requirements. They are also referred to ad package deals or turnkey projects. In this procurement method, the contractual relationships and transfer of payment fully correspond to the functional relationships.

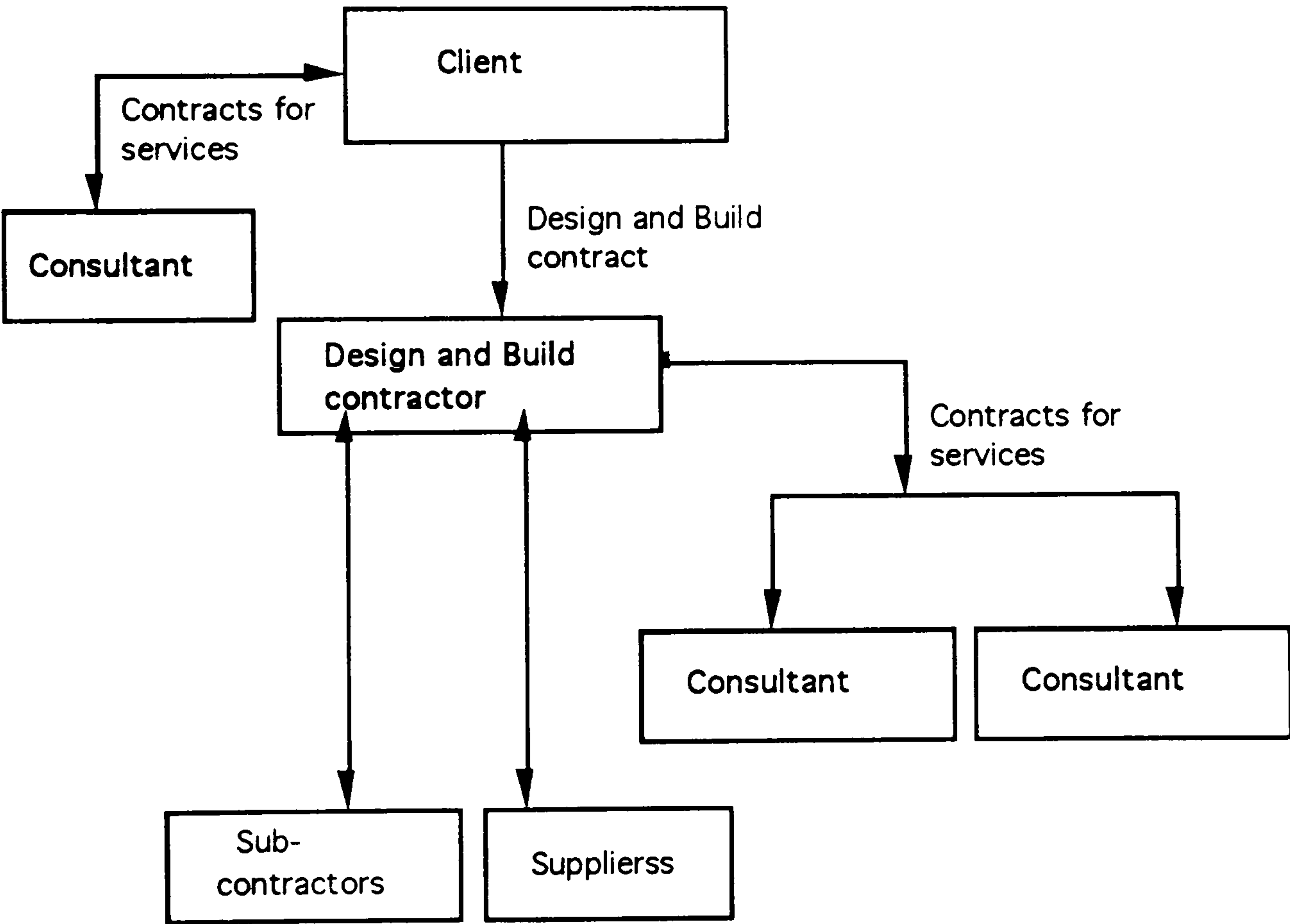


Figure 3. 5. Contractual relationships between parties in Design and build

The client is under contract with his own advisers and consultants for services and has only one additional agreement with the design and build contractor. The client also communicates solely with this contractor. Competitive tendering is difficult with this

method and hence price is not considered as the only crucial factor. Figure 3. 5 describes the contractual relationships between parties in the design and build procurement. Nahapiet and Nahapiet (1985) highlighted three main advantages of this method from their study and describes them in the following terms:

- (a) it provides single point of responsibility between client and the design builder;
- (b) it eases communications between the various specialists groups who are all part of a single organisation;
- (c) it is also believed that it provides a high degree of flexibility and response to changes at all stages of the project. All these result in early completion time with all its attendant benefits.

3. 7. 3. Management Contracting

Another development is management contracting where a large national contractor with a good reputation manages contract for a fee and contracts out on behave of the client all the design and construction works. Management contracting started to gain a foothold in the 1970s. The JCT Standard Form of Management Contract (1987) give a partial description of this procurement method. The management contractor is brought in at an early stage of the project on a fee basis. The role of the management contractor is to manage construction work according to the interest of the client without actual involvement in the construction work.

Management contracting is best suited for large scale, complex projects where rapid completion is a goal. Work may commence immediately after the client and authorities have approved the drawings. The design work proceeds in parallel with construction, which enables early completion. This procurement method requires mutual and cooperation between parties. The role of architects and other designers are untraditional under this procurement method. Expertise and involvement is also expected of the client. Parallel design and construction demands that the client is able to make quick decisions.

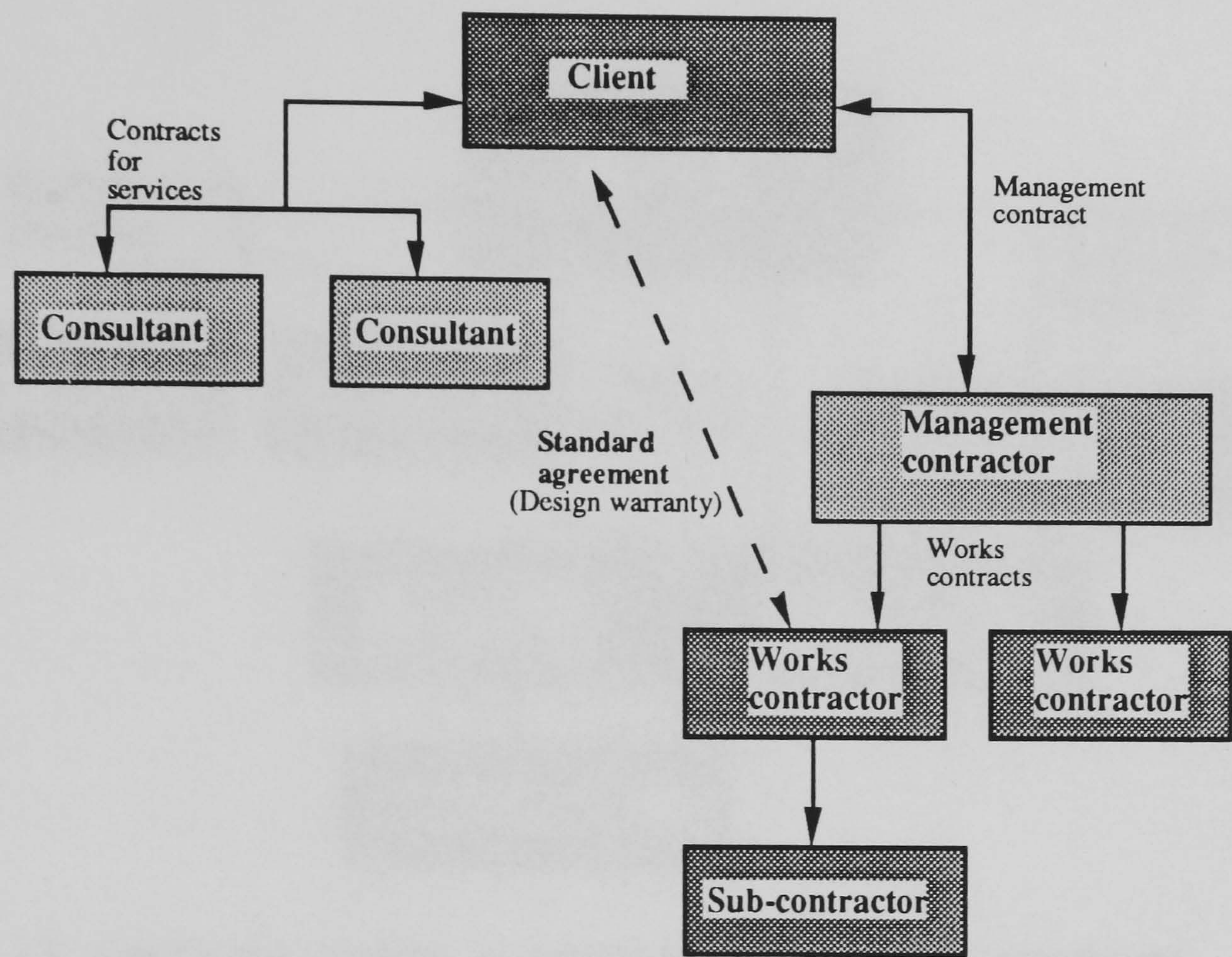


Figure 3.6. Contractual relationships between parties in management contracting

3. 7. 4. Construction Management

As a procurement method, construction management closely resembles management contracting. Construction management contractor is only a consultant to the client, working for his interests. Works contractors are directly under contract to and responsible to the client (Figure 3.7). Instead of organising the contribution of different specialists on a sequential basis, construction management treats projects planning and construction as mutually interdependent tasks. The task of the construction manager, who acts as the client’s agent, is to co-ordinate and control all aspects of the project so as to achieve the client’s stated requirements. Nahapiet and Nahapiet (1985) described construction management as a team approach to building since it generally involves the creation of a project group involving the client, construction manager, architect and other consultants

and sub-contractors as required.

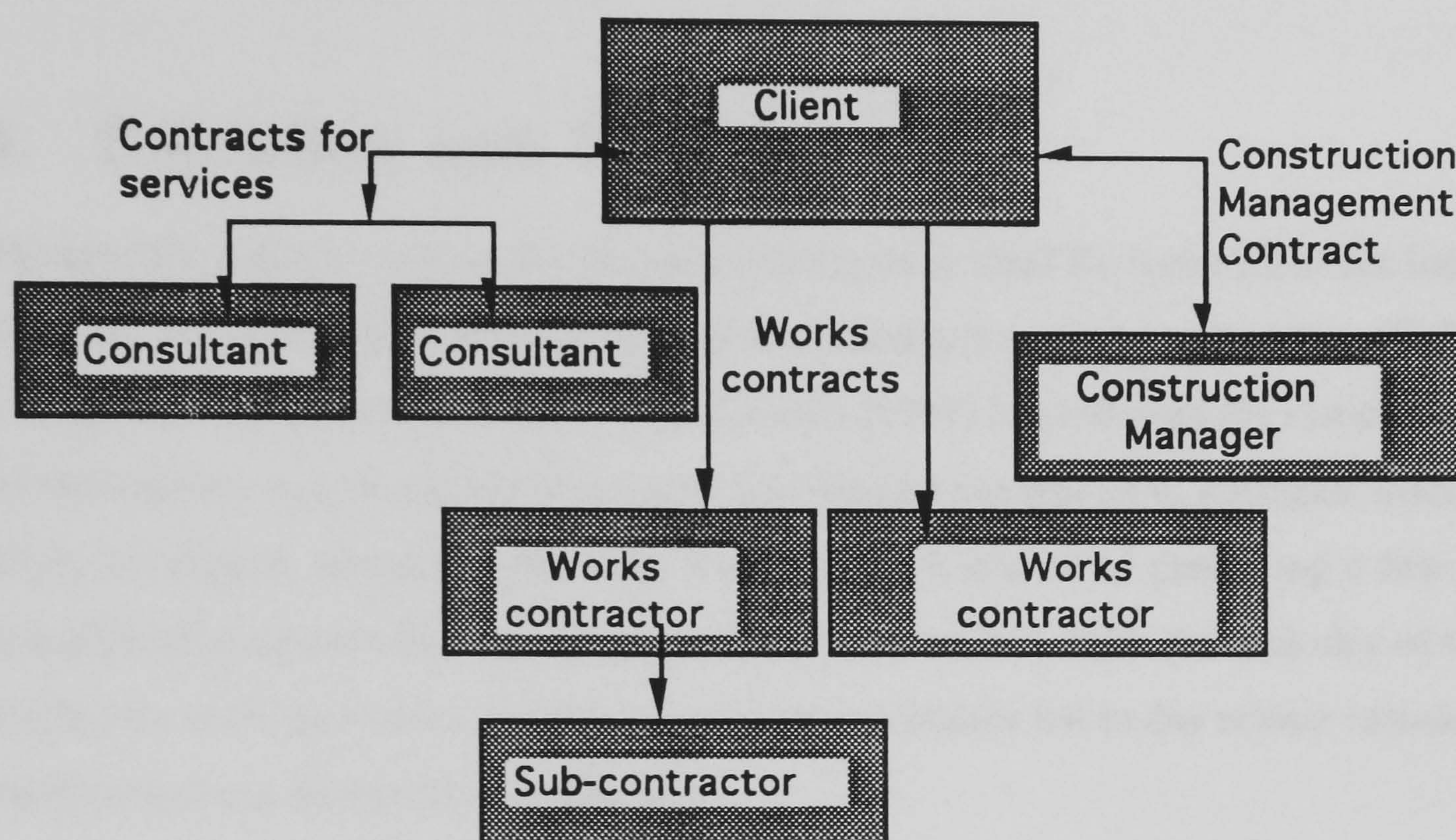


Figure 3.7. Contractual relations in construction management procurement

The main advantages offered by construction management are:

- (i) clients have greater degree of control over the project by having what they regard as a relatively independent construction manager acting as their agent, they are given more information upon which to base decisions and are thus able to make more conscious tradeoffs between cost, time and quality;
- (ii) it offers a higher probability of achieving project performance within tight time and cost constraints which, in part, results from the possibility for phased construction which allows for an early start on site and consequent earlier completion;

- (iii) it often establishes a cohesive team rather than a group of adversaries and, as a result, it is generally easier to overcome problems without undue delay and bargaining.

3. 6.0. Education and Training

Historically, today's construction industry developed to meet the demands of the Industrial Revolution and the rapid growth of population during the nineteenth century (Callender, 1992). The education system according to Harris (1991) has reflected the associated needs of the industry but development has been uneven and has tended to segregate disciplines. Thus, he argued, education gradually evolved into a system of producing a few highly scientifically trained engineer- graduates from universities, with the majority of tertiary studies for craft, technician and professional groups mainly left to day release instruction at local colleges at the behest of employers.

Overall, the construction industry has a poor training record and the extent of formal training is limited. It also has the lowest proportion of trained employees and in 1987 for example only 24 per cent of its employees were trained (Department of Employment 1990). Training in the industry is organised principally by the Construction Industry Training Board (CITB). The training provision and the methods employed, according to Callender (1992), are conservative with strong emphasis on traditional craft skills at the expense of those skills arising from new specialism and changes introduced by new technology, while time serving rather than skill testing remains a key characteristic of training.

The structure of the industry (See section 3. 3.0) makes the implementation and delivery of training in construction especially problematic and poses an enormous challenge for the CITB in particular. Furthermore, the growth of self-employment has led to the diminishing recruitment of trainees.

3.7.0 Summary

The unique characteristics of the UK construction industry has been described as being responsible for method of production, organisation, financial control, price determination, and procurement methods.

It is a fragmented industry with a growing number of small employers and self-employees, with a continually diminishing number of larger firms.

The activity of the client remains a key variable in the delivery of construction services. The client can be an individual, group of people or organisation, in general sense there are two groups of clients; public and private clients.

The traditional method of competitive bidding and tendering still remains the most dominant method of procurement in the industry although there are shifts in recent times to other methods such as management contracting and design and build.

Changes in the construction industry have transformed and diversified the industry's skill and training needs. However, the fragmented structure of the industry and its volatility have made it difficult to meet these new and changing needs

Chapter IV

An Introduction to Marketing

Chapter Four

An Introduction to Marketing

4. 1. 0. : Introduction

While stating the need for this research in Chapter 1 (section 1.4.0), it was revealed that the enterprises in the UK construction industry lack innovative marketing because of their limited view of marketing. Reported research on this topic also shows that the industry in general, is faced with conceptual difficulty as to what really constitute marketing (section 1.3.0). Earlier on in Chapter 1, it was mentioned that the senior managers in the UK construction industry often display naive marketing attitude (1.1.0) and that many in construction enterprises often fail to realise that marketing entails more than just playing with isolated promotional tools.

The work in this chapter explains relevant aspects of marketing as they relate to industrial and services organisation. An understanding of the concepts in this chapter is essential for effective appreciation of the attitude of offerers of construction services towards the marketing function. To facilitate this, the discussion in this chapter is centred on, the marketing concept, aspects of industrial marketing, marketing of services, measurement issues in marketing and marketing performance evaluation

4. 2. 0. Understanding the Marketing Concept

The practical implications of consumption being the purpose of production have only recently been recognised by business organisations (Giles: 1990). As long as the sources and supply of goods were limited and customer demands were comparatively unsophisticated it was possible for a manufacturing company to make profits, and to grow, by concentrating on production efficiency. The customer was essentially a problem solely for the sales force, whose task was to sell what had been produced. As production capacity increased and competition became more intense, more attention had to be paid to selling

process by adopting a marketing concept which starts with the customer in the belief that the most profitable business can come only by identifying, anticipating and satisfying customer needs and desires (Wilson:1965).

According to Levitt (1960), every industry was once a growth industry. But some that are not riding a wave of growth enthusiasm are very much in the shadow of decline. Others which are thought of as seasoned growth industries have actually stopped growing. In every case the reason growth is threatened, slowed, or stopped is not because the market is saturated. The reason advanced by Levitt is that there has been a failure of management.

In the same vein, Drucker (1974) argued, it is the customer who determines what business is. It is the customer alone whose willingness to pay for a good or service converts economic resources into wealth, and things into goods. What the business thinks it produces is not of first importance - especially not to the future of the business and to its success. What the customer thinks he is buying, what he considers value, is decisive - it determines what a business is, what it produces and whether it will prosper. And what the customer buys and considers of value is never a product. It is always utility, that is, what a product or service does for him. Because its purpose is to create a customer, the business enterprise has two - and only these two - basic functions: marketing and innovation. .

Kotler (1976), defined marketing concept as, “the management orientation that holds that the key task of the organisation is to determine the needs, and value of target market and to adapt the organisation to delivering the desired satisfaction more effectively and efficiently than its competitors.” He stressed that there are three underlying parameters of this concept, namely:

- (i) satisfying a defined set of wants of a defined group of customers;
- (ii) that satisfying wants requires an active programme of marketing research to learn what these wants are; and
- (iii) that all customers impinging company activity must be kept under marketing control.

Stanton (1971) said marketing concept is based on two fundamental beliefs. Firstly, all company planning, policies, and operations should be oriented towards the customer. Secondly, profitable sales should be the goal of a firm. In its fullest sense, he added, the marketing concept is a philosophy of business which states that the customer's wants and satisfaction are the economic and social justification of a company's existence. Consequently, all company activities in production, engineering, and finance, as well as in marketing, must, he insisted, be devoted first to determining what the customer's wants are and then to satisfying those wants while still making a reasonable profit.

Marketing is finding out what customers want and then endeavouring to satisfy them. Fisher (1991), described marketing as, giving clients what they really want, rather than what is thought or assumed they want, or what is considered best for them. Fisher went further to suggest that an enterprise can be successful if:

- (i) it grasps that marketing is a business philosophy and that market orientation should pervade every aspect of the company, influencing its commercial culture.
- (ii) its senior managers realise that a company should engage informal business planning;
- (iii) its directors realise that they should seek to strengthen the company's reputation by acquiring new, prestigious clients; and that it is vital to retain the existing clients.

Those who have had the foresight to grasp the true nature and benefit of marketing concept and have used it for long-term business relationship with the right clients, have reasoned that in order to secure work from more of the desired target client group, the company must increase its understanding of what this type of client consider important. At this point they identify their own competitors' strengths and weaknesses, the markets that they serve by sector, the current market conditions and any likely changes in the market place.

Marketing is the recognition and the use of the economic and other forces that exist within the market to create business and it is one of the motivating functions of any organisation. It is, according to Rowe (1975), that part of an enterprise which attempts to define 'what is our market?'. It is a management process.

Management must ensure that the whole organisation is dedicated to the service of its clients and the satisfaction of their requirements. To satisfy any requirement, one must first identify it; but more important still, in order to be ahead of our competitors, it is necessary to think ahead and anticipate requirements. Marketing is about achieving and managing business relationships (Pearce:1992). In the construction industry, most relationships involve the provision of services over a period of time. These services are delivered within a complex structure of client and project teams which form and disperse from project to project.

Marketing seeks to identify and anticipates clients needs and directs a firm's expertise and resource capabilities in such a way that the client continues to be satisfied and ensures that the firm achieves its long-term goals (Morgan and Burnicle:1991). Marketing is not merely employing a salesman or producing brochure, it is about the total way in which the company is orientated. It is a business philosophy in which each employee should be saturated. It should, according to Fisher (1989), dominate each point of contact the company has with a client, (past, present and future). Marketing analyses potential customers, what constitutes the market, what is required and at what price, and then systematically directs the efforts of the organisation towards meeting these requirements of the customer. Marketing assumes that organisation's needs and those of the customers can be reconciled (Pearce, 1992).

4. 2. 1. Aspects of Marketing Mix

Marketing activities are concerned with aligning an organisation business objectives with those of the client (Friedman, 1984). It positions and ensures that the organisation is well placed to take maximum advantage of changes in the business environment. This alignment involves positioning an organisation with respect to its markets, organisational resources,

It is essential to understand the criteria the client uses when buying a service and how well he is currently being served by competitors; and attempts to identify future trends in market place.

Perhaps the most commonly used definition of marketing is that of Chartered Institute of Marketing, which defines marketing as:

“the management function which organises and directs all those business activities involved in assessing and converting purchasing power into effective demand for a specific product or services and in moving the products or services to final customer so as to achieve the profit target or other objectives set by the company.”

In order to fully grasp both the concept and benefit of marketing, it would be worthwhile to note the following key points:

- (i) Marketing involves all the employees in the company and is an attitude of mind which believes and demonstrates throughout the practical outworking of its professional activities that a business can be run profitably only by identifying and satisfying existing or potential clients needs (Scanlon, 1988);
- (ii) Marketing can increase business profits, as it can, if applied, link effectively all activities of a business to the needs of a client (Bonoma and Clarke, 1988).
- (iii) Marketing can reduce uncertainty because of the activities of market research, which reveals trends and information which form the bases for decision-making (Zikmund, 1989).
- (iv) Marketing can generate new business because a major part of any proper marketing activity is that of seeking out new market sectors, sizes, level of competition and profitability (Kotler, 1986).

management structure, financial constitution and competition. This has to be achieved whilst maintaining a steady growth in the performance of the organisation. Market mix sets objectives about the performance expectations of an organisation and then assesses the implications of current operations (Scanlon:1988).

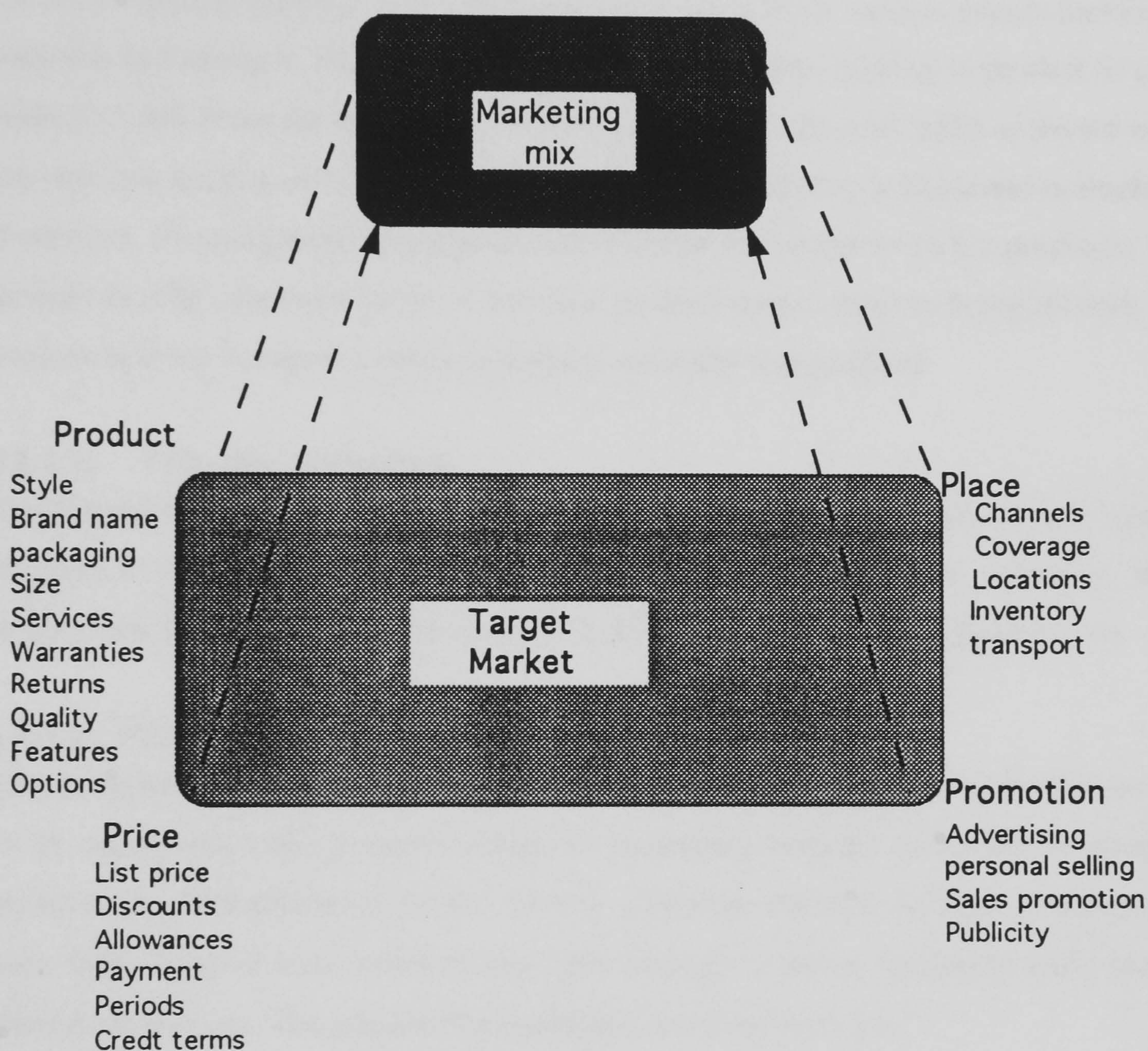


Figure 4.1: The 4Ps of the Marketing mix.

Source: Kotler, P. (1986), *Principles of marketing*; Prentice/Hall

Essentially, marketing mix is a collective phrase for wide variety of marketing skills ranging from basic product development, and pricing to packaging and servicing and embraces a broad spectrum of elements (Borden, 1964). There are four factors governing an organisation market mix ((Kotler, 1986. see also Fig 4.1):

- (i) products/services planning;

- (ii) price/ fees structure;
- (iii) promotions; and
- (iv) place.

4.2.1.1.Services/products planing

Services/Products planing involves getting feed back from various clients,looking for weakness and strength. This refers to policies and procedures relating to product lines and markets to sell. From the feed backs, services offered are improved, while at the same time new services are planned and markets tested. Services planning is important in marketing of services. Planning helps the organisation's senior executives to decide precisely, what services to offer, the exact scope of services, product range currently being offered, what needs to be done to improve services/products currently being offered.

4.2.1.2. Price/fee Structure

The determination of price/fee structure varies from one industry to another. While price/fee structure is determined by producers of products/services in most industries, in the construction industry the price/fee structure is determined by the market place-clients.

4.2.1.3. Promotional Activities

Marketing has all the responsibility to create and project a suitable and appropriate image for an organisation and to communicate an awareness amongst customers or clients in market place. Promotional activities concern customer-marketer relation. Customers are taken from level of total unawareness right through to being contented purchasers of products or services. The process of promotional activities involves:

- (i) projecting an image;
- (ii) creating an awareness;
- (iii) making prospective customers knowledgeable;
- (iv) establishing conviction amongst prospective customers;
- (v) turning prospects into clients and customers; and
- (vi) maintaining commercial loyalty.

The process of promotion and presentation is carried out through the following activities or techniques:

- (i) corporate identity programmes;
- (ii) public relations;
- (iii) publicity;
- (iv) advertisement; and
- (v) sales promotions.

4.2.1.4. Place

This is concerned with how the client receives the service or product. The channel of delivery is very important with services. The emphasis should be on how service is delivered to the client, the form it takes, content, regularity and timing.

4.3.0.: Aspects of Industrial Marketing

Industrial marketing is known commonly today as ‘business to business marketing (Fisher:1986). It is a large market with considerable purchasing power and widely diversified, covering a wide range of industries such as:

- (i) manufacturing;
- (ii) building and civil engineering ;
- (ii) the property, finance and insurance industries;
- (iv) transport and communication industries; and
- (v) .wholesale and retail.

But despite its size and diversification, industrial marketing has been largely unknown and its problems neglected by researchers. Kotler (1972), put forwards three reasons for this attitude:

- (i) that marketing as a management function has not been highly developed in industrial goods companies as in consumer goods companies;
- (ii) that often the technical nature of the products or services deterred research because it was felt that this technical complexity requires expertise not possessed by marketing experts;

- (iii) that even situations where there are marketing departments, they are often overshadowed by other departments.

Kotler, however, added that while product design, cost, and service do tend to loom larger in industrial marketing than advertising, promotion and merchandising, one must avoid blind spots with respect to the importance and creative use of the elements of the marketing mix in any marketing situations. It is important to note that adapting of marketing technique to any marketing situation will depend upon particular marketing problems posed by the market environment. It is difficult to distinguish between industrial and consumer goods, because, according to Fisher (1989), even though there are differences in emphasis in the marketing of industrial and consumer goods, the principles of industrial and consumer marketing are the same. There are two fundamental differences between industrial marketing and consumer marketing: buying behaviours; and product/service classification

4. 3. 1.: Industrial Buying Behaviour

Wilson (1971) suggested that an important difference between industrial and consumer marketing lies in the behaviour of the buyers and in the nature of the demand of industrial markets. Webster (1979) was of the same view when he said that industrial marketing is distinguished from consumer marketing more by the nature of the customer than by the nature of the product. He added that industrial buying behaviour do not just happen, but that they represent a complex set of activities engaged in by many members of the buying organisation and result in a commitment to purchase goods and services from a vendor.

The central difference between industrial buyers and consumer buyers, according to Webster, is the motivation for the purchase. Whereas companies and institutions purchase to meet organisational purposes, the consumers purchase to contribute to their own well being and those of their families. He listed several other factors which distinguish industrial buyers.

- (i) Industrial market is an oligopsonistic market, i.e., relatively few customers
This situation according to Webster, influences the strategies of such companies.

- (ii) Industrial markets tend to have a high unit value distinct from fast moving consumer goods markets, but not always distinct from consumer durable markets.
- (iii) There tend to be a high degree of production and purchasing complexities in industrial markets e. g. contractual conditions and in most cases industrial buyers are better informed about what they are purchasing, about alternative sources of supply and competing products.
- (iv) There appears to be a more distinct interdependency between the industrial buyer and seller as compared with those of consumer markets.
- (v) Industrial buying is notable for the existence of decision making unit (DMU) which sorts and ranks product offerings and covers all those individuals who initiate, specify, control and purchase goods or services for their organisation.

4. 3. 2. Organisational Buying Behaviour

Webster and Wind (1972) define organisational buying as “the decision-making process by which formal organisations establish the need for purchased products and services, and identify, evaluate, and choose among alternative brands and suppliers.” Each part in the buying process, according to Kotler (1986), has subtle roles and needs. In trying to understand organisational buyer behaviour, Kotler argued that marketers must find answer to some difficult questions. What kind of decisions do organisation buyers make? How do they choose among various suppliers? Industrial demand, he said, is a ‘*derived demand*’. It ultimately comes from demand for consumer goods. Organisational buying process tends to be more formalised than the consumer buying process and both the buyers and the sellers tend to be more dependent on each other.

4. 3. 3.: Product/service classification

Industrial purchasers buy goods or services primarily as contributors to the activities of the organisation. Demand for industrial goods, Webster (1972), observed is derived from the demand for consumer goods and services. This derived demand is a function of various economic and social pressures and in the case of public sector, political pressures as well. Hence as Webster points out it is more realistic to say that industrial customer's purchases reflect their 'expectation' about future demands for their goods and services. The relationship between consumer spending and capital expenditure is complex. For example, a firm may invest when consumer demand is slow, because they believe that it will revive or may undertake investment for its own sake, perhaps for strategic or competitive reasons.

A clear distinction between industrial and consumer goods, according to Fisher (1986), is very difficult. The main difference he noted lies in emphasis in the marketing of industrial goods. Furthermore, he observed that the differences in marketing emphasis can be shown clearly by attempting to classify industrial products. He then classified them into four broad groups:

- (i) raw materials;
- (ii) capital goods;
- (iii) accessories, production equipments and plants;
- (iv) consumables.

4.3.3.1. Raw material

These include products entering directly into manufacture in their natural form, or semi-manufactured goods. Marketing of raw materials is influenced by factors such as: there are few producers, products graded to precise standards, e. g., aggregate or sand graded to the relevant British Standard. Semi-manufactured items such as fabricated materials, components and parts which are part processed and will eventually become part of a finished product, e. g. bolts, nails, or semi-conductor chips for the electronics industry.

4.3.3.2. Capital Goods

These are capital investment items such as installations, buildings, and non-fixed plants such as vehicles. They are usually dominated by high technical ability on the sides of both

the customer and the producers. Marketing of capital goods according to Fisher (1986), presents a major challenge to a firm's senior management, because each sale is important and because a total package is sold; the market sales team Fisher added, must be able to deal with all aspects of the equipment or building from selling the concept and benefits of such equipment, through specification and installation to maintenance scheduling.

4.3.3.3. Accessories and production equipments

These are components and accessories used in the production activities of an industrial firm without influencing the operational scale of the company in the same way as the capital goods would. The life span of these accessories are shorter than that of capital goods but longer than items of the consumables. The marketing operation of these items is split between the manufacturer and the distributor. For example marketing of operation of construction plants is split between manufacturers and plant hire firms,

4.3.3.4. Consumables

These are short-lived items, low-priced and easily purchased. They are operational goods and aid production, welfare, safety or day-to-day administration which are not normally incorporated into the final product. Their examples range from stationeries, shovels, safety helmets, to first-aid equipments.

4. 4. 0 Marketing of Services

Many writers have commonly expressed the view that there is a paucity of material available on the subject of marketing of services. While there may be some truth in this view, the services area according to Cowell (1980), has not been entirely neglected as some suggest. Adding that, firstly, there are a number of marketing textbooks available which devote at least a chapter to the topic of marketing of services. Earlier works include those of Pyle (1931), Converse *et al* (1958), Stanton (1978), and Kotler (1976). Besides these text books more recent works by Bateson (1989), Lovelock (1988) and Gronroos (1978; 1988; 1989; 1985; 1990), to mention but few, have all reflected the growing interest in applying marketing to a wide range of service settings and activities.

Service companies, according to Gronroos (1978), are less marketing-oriented than firms

which are marketing physical goods. Gronroos suggested that a good deal of the marketing problems of service companies may have been caused by lack of a theory of its own for service marketing, adding that most severe problems of service marketing are to be found in connection with planning of a marketing mix. The service concept itself, Gronroos (1978), observed, as confusing. He identified this confusion as the faltering services concept, which he said may well be a result of the idea of a goods-service continuum. All offerings may, he suggested said, be described by the continuum with pure goods at one extreme and pure services at the other, and with most offerings falling somewhere between these points. This continuum concept mixes the two service concept separated above. From a marketing planning point of view the continuum does not exist, or at least it is highly misleading to the marketer. It gives the impression that every offering basically is the same and can be planned in a similar manner applying the same planning instruments. An offering, he said, concerns either goods, with or without service support (e.g., transport, maintenance and repair), or services which may be pure services or services which make it possible to use goods or which are accompanied by goods such as: car rental; hotel; and inclusive tours.

No distinction, Gronroos observed, is made between services as objects of marketing and services as variables, i.e., as means of competition when marketing goods. Marketing of services concern services in the first sense of the concept. The service is the object of marketing i.e., the company is selling the service as the core of its market offering. When services are treated as means of competition, the core of the selling proposition is a physical goods, not a service. Then it is not service marketing, and the planning situation can be coped with by means of the traditional concepts and models of marketing literature.

Bateson (1989), writing on a perspective of service marketing, noted that it is extremely difficult to conceive of a pure good or a pure service. A pure good implies that the benefits received by the consumer contains no element supplied by service. Similarly, a pure service would contain no goods element. In reality, most services contain at least some goods elements, such as hamburger at McDonald's or the bank statement from local bank. Also most goods, at least offer, a delivery service, and firms are increasingly using services of all kind to differentiate their goods from those of the competitors. The goods/services

dichotomy is, in fact, a subtly changing spectrum with firms moving their position within it over time. This may explain why argument over the definition of services often degenerate into semantics and examples.

Historically, according to Lovelock (1989), many service organisations have not seen the need for a separate marketing function, whereas in the goods market, marketing is the channel through which consumer needs are communicated to production and finish goods are distributed to consumers: in services, however, the consumer come to the factory and are themselves part of the production process. In the context of services there is very little explicit marketing knowledge today. Most frequently the marketing establishment, both academicians and practitioners, strongly resist the view that the marketing of services in any critical dimension could differ from that of physical goods.

Gronroos (1989a), however, observed that there are some sign of a shift in thinking, of which he opined will benefit firms and institutions in the vast and growing service sectors of western economies, where the service sector accounts for almost 50 per cent of total employment and gross national product. Gronroos further noted that today there is some evidence supporting the opinion that marketing is a difficult task in the service sector, and that service companies are less marketing oriented than firms in the goods-producing sector.

4. 4. 1. Characteristics of Services

A marketed service can be described as a market transaction by an enterprise or an entrepreneur when the object of the market transaction is other than the transfer of ownership (or title, if any) of tangible commodity. In an attempt to describe the characteristics of services, it would be more fruitfully like Gronroos (1978) stated, to find out in what respects services differ from goods, and to examine the implications for marketing planning caused by characteristic of services. He identified three characteristics which are vital to planning of service marketing:

- (i) intangibility of service;
- (ii) production/consumption interaction;

- (iii) lack of ownership and transaction of ownership.

4.4.1.1. Intangibility

Services are immaterial and physically intangible. This is perhaps the most important characteristic of services. The customer can not feel, taste, smell, or see a service before he buys it. He is not able to evaluate the abstract service, he will look for tangible clues in the service context, which he can use as a basis for an evaluation, so they must be transformed to concrete offerings, which can be evaluated and compared with to those of the competitors.

4.4.1.2. Production/consumption interaction

The second essential service characteristic is the buyer/seller (production/ consumption) interaction in most service businesses. Services cannot be separated from the producer, and the producer and the seller are the same organisation. A service is considered to be consumed as it is produced. Thus , producing and marketing are very interactive, both activities being simultaneously performed by the same persons in a service company. Gronroos noted that the inseparability of services, makes only direct distribution possible, adding that no normal distribution is possible as there is nothing tangible to distribute using the usual channels of distribution.

4.4.1.3. Lack of ownership and transaction of ownership

A third characteristic of services is the lack of ownership and transaction of ownership when dealing with services. For example, the customer does not take title for an hotel room, or to a hired car. One is only given the right to use things, and as symbol of lack of ownership, one may get a ticket, certificate, or value coupons.

As a summary, it could be said that services do differ from goods as objects of marketing. Services are activities, not things, although physical goods or things may be needed either to support or facilitate service consumption. Service is produced in a process which simultaneously is the service. Therefore, services cannot be treated like goods in a market planning context. a service marketing context is needed.

4. 4. 2. Aspects of Service Marketing Mix

The marketing mix of a firm, Borden (1964) stated, is the evolution that comes from day-to-day marketing. At any time the mix represents the program that a management has evolved to meet the problems with which it is constantly faced in ever changing and ever challenging market. But the overall strategy employed in a marketing mix is the product of longer range plans and procedures dictated in part by past empiricism and in part, if the management is a good one, by management foresight as to what needs to be done to keep the firm successful in the changing world.

The heart of service product is, according to Bateson (1989), the experience of the consumer, which takes place in real time. In his analysis of the traditional goods-oriented marketing mix concept, Gronroos (1978), observed that all marketing variables in the same context is not, usually possible. He said different sub mixes are thought to be planned separately, and, finally, blended into a total marketing mix. Only the product mix must, in the same way, be already shaped, before detailed pricing, distribution, and communication planning can take place. This is a way of planning an efficient marketing mix for physical goods, and models are developed for goods marketing. No matter how sophisticated such models are, they take for granted that it is possible to plan submixes, which afterwards can be coordinated into one total mix. This is possible, if there is a tangible product involved. Then there is something to develop, to price, to distribute, and to communicate about. That is, in goods marketing there is a tangible core around which the offering can be developed in a manner reflected by traditional marketing mix models. In service marketing there is no such tangible marketing core. It is simply not possible to plan separate submixes, which can be blended into one total marketing mix. This may be the main reason why service firms are less marketing-orientated than other companies.

4.4.3. Strategies for Services Marketing Mix.

Services differ as to whether they meet a personal need or a business need. Furthermore, service businesses are more difficult to manage when using only traditional marketing approaches (Kotler and Armstrong:1991). In product business, products are fairly standardised and sit on shelves waiting for customers. In a service business, the customer

interacts with a service provider whose service quality is less certain and more variable. The service outcome, Kotler and Armstrong argued, is affected not just by the service provider, but the whole supporting production process. Thus, they added, service marketing requires more than just the traditional external marketing using the 4Ps - (Product, price, place, and promotion), but also requires *internal marketing* and *interactive marketing*.

4.4.3.1. Internal marketing

The need for most service organisations to plan as well as direct marketing and operations as one function has led to the formation in the leading companies of strategic service vision (internal marketing). Lovelock (1988) described elements of internal marketing as that which consist of identification of a target market segment, development of a service concept to address target customer's needs, codification of an operating strategy to support the service concept, and design of a service delivery system to support the operating strategy.

Kotler and Armstrong (1991), explained that internal marketing means that the service firm must effectively train and motivate its customer-contact employees and all supporting service people to work as a team to provide customer satisfaction. For firm to deliver consistently high service quality, they advised, all employees must practice customer orientation. Marketers, they argued, must also get every one else in the organisation to practice marketing. Internal marketing, they added must precede external marketing.

High-performance service companies, they all, (Lovelock:1988, and Kotler and Armstrong:1991), argued have “gained their status in large measures by turning the strategic service vision inward: by targeting important groups of employees as well as customers.

4.4.3.2. Interactive Marketing

Interactive marketing means that the perceived service quality depends heavily on the quality of buyer-seller interaction. Kotler and Armstrong (1991), explained this by saying that in product marketing, product quality often depends little on how the product is obtained, but in service marketing, service quality depends both on the service deliverer

and on the delivery, especially in professional services. The customer judges service quality not just on technical quality (say, the success of surgery) but also on its functional quality (whether the doctor showed concern and inspired confidence). Thus professionals cannot assume that they will satisfy the client simply by providing good technical service. They must master interactive marketing skills or functions as well.

Marketing orientation means that a firm or organisation plans its operations according to market needs. However, with increase in competition, rise in cost, falling productivity, and fall in service quality, there is need for more sophisticated marketing approach.

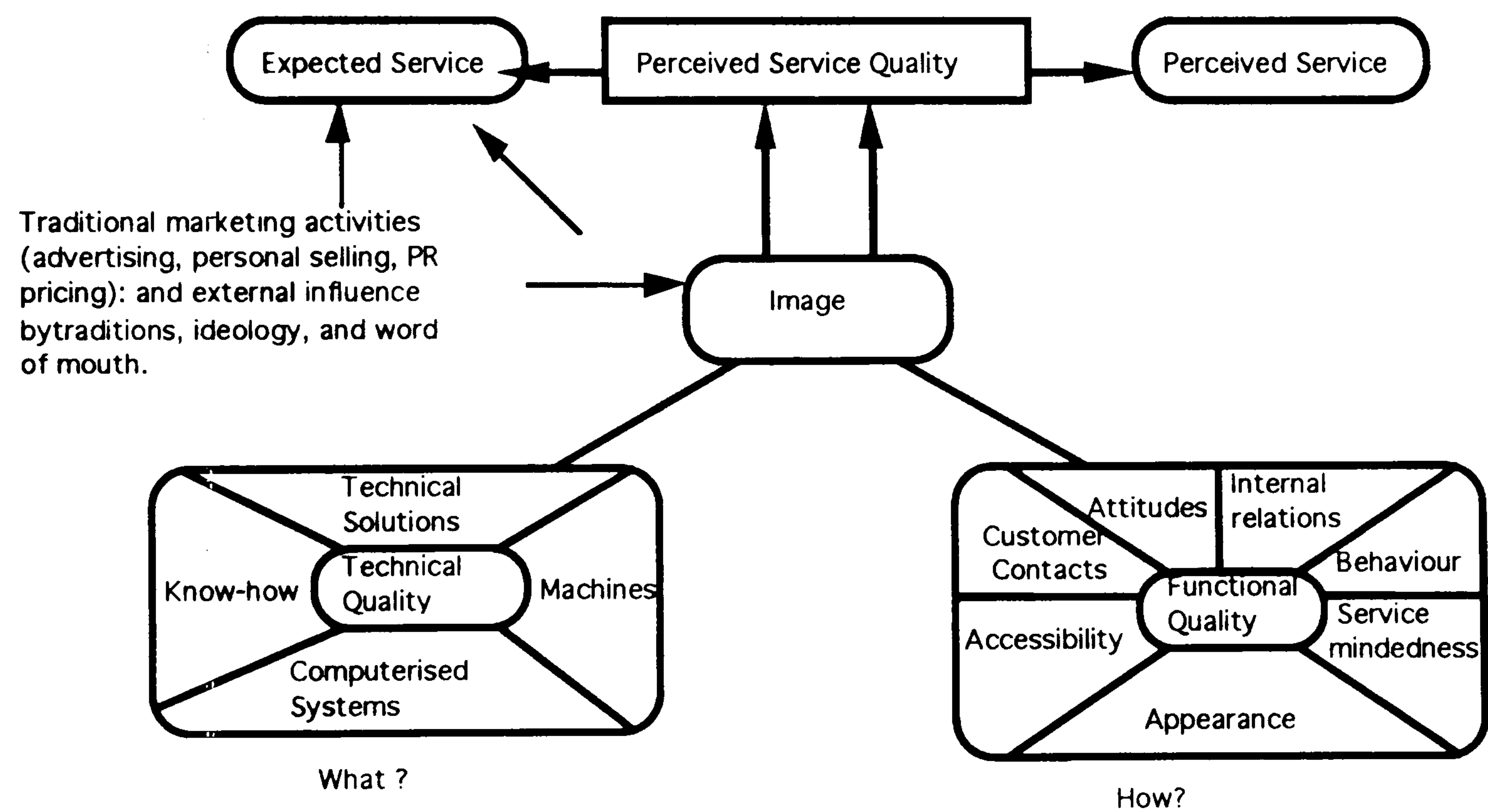


Figure 4.2 : Managing the perceived service quality

Source:Christian Gronroos(1989);*Innovative marketing strategies and organisation structure for service firm* ; Managing services marketing: Dryden Press, 1989.

Gronroos (1982) expresses his belief that quality of service depends on two variables of expectation and perception; both of which are of considerable importance since many of the factors which impact on these variables can be controlled or influenced. Gronroos added that, while the technical quality is capable in many circumstances of being evaluated

objectively, the assessment of functional quality is highly subjective. The overall assessment of service quality emerges when the client compares the perceived service with the expected service (See Figure 4.2)

To the user of a service, the technical quality - his evaluating of the service; and the functional quality - how the service is received, the impact of one client on another, the attitude of the professionals and support staff, are most important. An important point to note, however, is that services marketing literature corresponds more closely with practices and strategies used by services organisations than with the problem they face.

4. 5. 0. Measurement issues in Marketing

Definitional issues for marketing inputs and output, according to Bonoma and Clark (1988), has been some of the difficulties faced by many authors. In many ways, the macroeconomic literature on marketing productivity is mired in confessed compromises between need for quantification and the reality of available data. Bonoma and Clark also agree with most scholars that the true measure of output of marketing includes a series of services performed for the customer, such as delivery, credit, warranties, and so on. They examined a number of works and researches on both macroeconomic and microeconomic measures on marketing input and output and observed that input measures are quite varied, although some form of marketing expense quantification represents the popular choice. Researchers argue over what is marketing expense, and there is great disagreement over what are “relevant”, “complete”, or just “direct” marketing expense. On examination of output they noted that profit measurements are by far the most frequent choice among the firm-level analysts, followed by sales and then a host of yardsticks advocated by one or two individuals.

4.5.1. Measures of Marketing performance

The process of measuring managerial performance is one which has been subjected to misunderstanding and suspicion for years (Sloama, 1980; Oglesby, 1989). The prime purpose of performance measurement is, according to Sloama (1980), to provide an objective, impersonal basis for performance evaluation. If the resultant evaluation is faulty, i.e., if the level of performance is actually significantly below that which the measurement

system displays, then the evaluation of that performance is obtained from some other, *undefined measure*. The obvious solution is to include that “other undefined” measure within the measurement programme.

Finally the effectiveness with which a managerial performance measurement programme is administered is certainly as important as the programme itself - perhaps even more so. A well conceived programme if poorly administered, will result in a counter productive effort (Oglesby, 1989).

4. 5. 2. Multiple-Criteria Measures in Marketing

Managerial standards of performance can be expressed in many ways other than direct output. Target dates, time cycles, and market share are only three examples of many measurements which are relevant and material. Obviously, standards of performance must be expressed in terms of the same ‘language’ as the objectives. They are the milestones which mark the path towards objective achievement. They are criteria against which actual performance will be compared. They are the data point which ‘track’ successful attainment of the defined objectives. Performance standards exist for every major function or activity in the firm. The selection of the specific quantitative value is governed by the gap between the most recently recorded performance and the level defined by the objective.

Marketing evaluation is based on both quantitative and qualitative criteria. Selecting the exact set of criteria for evaluating marketing depends on the organisation’s size, industry, strategies, and management philosophy (Bonoma and Clark, 1988). For example an organisation pursuing a market-development strategy, could have an entirely different set of evaluative criteria from an organisation pursuing a retrenchment strategy. But as David (1991) suggests, the most commonly used quantitative criteria to evaluate strategies are financial ratios, which strategists use to make three critical comparisons:

- (i) compare the firm’s performance over different time periods;
- (ii) compare firm’s performance to competitors; and
- (iii) compare firm’s performance to industry averages.

David, however, argued that there are some potential problems associated with using quantitative criteria for performance evaluation. First, most quantitative criteria are geared to annual objectives rather than long-term objectives. Secondly, different accounting methods can provide different results on many quantitative criteria. Thirdly, intuitive judgments are almost always involved in deriving quantitative criteria. For these and other reasons, qualitative criteria are also important in evaluation performance. Human factors such as high absenteeism and turnover rate, poor production quality and quantity rates, or low employee satisfaction can be underlying causes of declining performance. Marketing, finance/accounting, or R&D factors can also cause financial problems.

Chakravarthy (1986) cautioned that, measures of performance rooted in financial accounting, have come in for a lot of recent criticism. He listed the problems that have been cited with this approach as:

- (i) scope for accounting manipulation;
- (ii) undervaluation of assets;
- (iii) distortion due to depreciation policies, inventory valuation and treatment of certain revenue and expenditure items;
- (iv) differences in methods of consolidating accounts; and
- (v) differences due to lack of standardisation in international accounting conventions.

Many writer and scholars such as , Thomas (1984), Bucklin (1972), Mehrotra (1984), *Fortune* survey (1983, 1984, 1985) of corporate reputation for the computer industry and Bonoma (1988), (see table 3.1), also propose multiple-criteria measures to judge marketing performance.

Moreover, accounting-measures-of-performance records only the history of a firm. Monitoring a firm's strategy requires measures that can also capture its potential for performance in future. The spread between the market and book values of the firm has been shown to a measure of the perceived ability of the firm to return to its stockholders an

amount in the future in excess of their expected return (Rappaport, 1981). Conventional referents of performance, whether they be measures of profitability, like return on sales (ROS), return on equity (ROE), or financial market measures, are unsatisfactory discriminants of ‘excellence’.

Table 4.1. Multiple-criteria measures of marketing performance

- 1. Return on investment
- 2. Return on sales
- 3. Growth in revenue
- 4. Cash flow/Investment
- 5. Market share
- 6. Market share gain
- 7. Product quality relative to competitors
- 8. New product activities relative to competitors
- 9. Direct cost relative to competitors
- 10. Product R&D
- 11. Process R&D
- 12. Variations in ROI
- 15. Financial soundness
- 16. Use of corporate assets
- 17. Quality of management
- 19. Long-term investment value
- 20. Quality of product or service
- 21. Innovativeness
- 22. Ability to attract customer
- 23. Develop and keep talented people
- 24. Community and environmental responsibility

Perhaps this should not come as a surprise, since the above measures of performance have at least three major limitations:

- (i) they assume that a single performance criterion can assess ‘excellence;
- (ii) they focus only on outcomes to the exclusion of transformation process; within the firm; and
- (iii) they ignore the claims of other stakeholders besides the stakeholder.

Chakravarthy sums up by saying that, while multi-factor measures of firm’s short-term viability or measures of satisfaction of the firm’s stockholders define the necessary conditions that an ‘excellent’ firm must fulfil, they ignore the ability of the firm to transform

itself to meet future challenges. Performance measures that help evaluate the quality of a firm's transformations are the true discriminators of 'excellence'.

Performance evaluation, he said, must meet several basic requirements to be effective. performance evaluation should therefore be designed to provide a true picture of what is happening. Selecting the exact set of criteria for evaluating performance depends on a particular organisation's size, industry, strategies and management philosophy. Performance evaluation should however, be based on both quantitative and qualitative criteria.

4.6.0 Marketing Performance Evaluation

No matter what the objectives of the firm, all managements are (or should be) interested in increasing the productivity of their marketing operations, thus favourably affecting such factors as 'growth', sales volume, market share, and net profits (Sevin:1965). Sevin's work was intended to show how any business firm can increase its sales volume or its net profits very substantially, and more than once, by obtaining and using:

- (i) marketing-cost and profitability information and
- (ii) marketing-experimentation information to do better job of allocating its marketing efforts to the various segments of its business.

Sevin's argument for his analytic approach, including information gathering on profit ratios plus experimentation to assess sensitivities, is essentially that it works. He noted that even in large and efficient managed businesses, reallocation of effort has always worked.

Many studies and researches have looked at the relationship between company performance and planning activity and marketing orientation. Effort is made in this section to review some of those leading studies relevant to this research and to the understanding of relationship between marketing orientation and company performance:

- (i) PIMS Project
- (ii) Herbert (1984);

(iii) Hartley (1985)

4.6. 1: PIMS Project

The PIMS (*Profit Impact of Marketing Strategy*) study is an on-going and continuing analysis of the relationship between strategy, market conditions and company performance based on a data base of almost 3,000 business units from some 450 corporations. Using financial, market, and operational information, researchers have constructed a model of the relationship between profit and marketing strategy. The first two phases of the project identified 37 basic factors which explained the variation in profitability amongst the businesses studied. The heart of this model is a regression equation based on these 37 variables, that predicts pretax return on investment (ROI)* .

As reported by Schoeffler, Buzzell and Heany (1974), six of the thirty-seven independent variables were of particular importance (See table 4. 2). The first three of these independent variable are undoubtably marketing related. It can also be argued that R&D and corporate diversity are also related to marketing via the planning process.

Market share is almost as profit as a yardstick of marketing performance. Market share is prominent in a number of strategic planning treatment. The growth-share matrix developed by the Boston Consulting Group (BCG) for portfolio planning, (Abell and Hammond:1979), argues that the cash-generating potential of a business may be approximated by examining the growth of that business’s market, and the relative market share of the business in that market. The PIMS study emphasises the importance of market share on return on investment (ROI), i.e., pretax operating income to average investment.

The study also shows that market share and product quality have effect on ROI, as shown on the table below. (See Table 4.3). The table shows that superior quality and high market share yields higher ROI. High-growth, high-share businesses according to the study produce fairly neutral cash flows, because while high-share businesses should throw off cash, high-growth businesses require increasing amount of working capital to finance growth. Low-growth, low-share businesses are similarly neutral: Low working capital needs offset low cash flow potential. High- growth, low-share businesses are heavy cash

users, since they are not yet large enough to provide internal funding for their working capital needs. Low-growth, high share businesses large positive cash flow because they require little financing for growth relative to strong cash positions their competitive strength provides.

Table 4.2. Buzzell and Heany’s independent Variables

Variables	Definitions
(i). Market Share	i.e., the ratio of sales, by a business, in a given time period, to total sales by all competitors in the same market.
(ii). Product (service) quality	i.e., the quality of each participating company’s offerings, appraised in terms of what was percentage of sale of product from each business, in each year, which were superior to those competitors.
(iii). Marketing expenditure	This is the total cost of sales force, advertising, sales promotion, marketing research and marketing administration but not physical distribution.
(iv). R and D cost	This refers to the total cost of the product development and process improvement.
(v). Investment intensity	Referring to the ratio of total investment to sales
(vi). Corporate diversity.	An index which reflects the number of four digits American S. I. C. industries in which the company operates, the percentage of total corporate employment in each industry and the degree of similarity or difference amongst the industry in which it operates.

Table 4.3 : The growth-share matrix

Growth	Share	Cash flow
high	high	neutral
low	low	neutral
high	low	negative
low	high	positive

A careful review of the PIMS study provides the following observations: First, that a company needs to plan for product quality and marketing expenditure in order to achieve high market share, and to invest in R&D to hold this share and facilitate corporate diversity. Second, the study provided an insight into particular strategic marketing issues and performance: notably market share and product quality. It specifically focuses on marketing strategy and performance than general planning. Thirdly, PIMS does establish a data base to underpin the relation between marketing planning and company performance. And lastly, PIMS uses only ROI as a measure of performance. On this point,

4.6.2. Herbert (1984)

Herbert along with many other authors like Hartley (1985), have referred to other factors affecting performance of a company's marketing practice. Herbert looked at success in performance terms of those companies short-listed for Business enterprise Awards 1980-83. Using a methodology based on case study, Herbert looked at these companies in terms of eight characteristics:

- (i) Leadership. Quality of the entrepreneur
- (ii) Authority. The need to give delegated responsibility enough autonomy to respond to the environment.
- (iii) Control. The utilisation of appropriate tools of control
- (iv) Involvement .Involvement of managers at all levels
- (v) Market orientation. Commitment of time, effort and resources to putting the marketing concept into practice.
- (vi) Zero basing. The ability to conduct objective S.W. O. T. (Strength, Weakness, Opportunities, and Threats) analysis.

- (vii) Innovation. The essential creative element
- (viii) Integrity. A responsible approach to managing the firm.

Planning and marketing orientation formed the key focus of Herbert's work. The remaining characteristics are also related to the personality and attitude of the senior management. His work seems to suggest that Planning and marketing orientation is a manifestation of good management practice.

4.6.3 Hartley (1985),

In his book, *"marketing Successes, Historical to present Day: What we can learn"*, Hartley highlighted the following generalisation concerning marketing successes:

- (i) Firms need a growth perspective and it is critical that executives manage growth effectively.
- (ii) Innovation is important - not only in terms of new products but also in terms of new ways of marketing, e. g. distribution channels, promotional tools, etc.
- (iii) Imitation can prove to be a valuable method of improving performance. There are, Hartley observed, good arguments for identifying those aspects of successful competitors (even similar but non-competing firms), that contribute most to the success and to adopting them if compatible with the resources of the imitator.
- (iv) Firms need to appreciate the dynamics of their market places - both in terms of changing needs/wants and changes in competitive performance.
- (v) The targeting concept in marketing is centre to success. The better the firm matches its strength to the perceived needs of the most appropriate segment, the more successful it is likely to be.

- (vi) The firm needs to demonstrate differential advantage over the competitors in the minds of the target audience.
- (vii) Customer satisfaction must always be the objective of the executives
- (viii) A firm must have a good relationship with its channel of distribution
- (ix) Marketing research is a useful tool in identifying target segments, assessing perceptions of differential advantages, etc.

Hartley (1984) and Herbert (1985) both see the basic marketing concept - customer satisfaction as central to success. They are of the view that strategic issues such as targeting, differential advantage, and composition of marketing mix, stem logically from this acceptance of a consumer orientation in successful firms.

4.7.0. Summary

The discussion in this chapter has centred on the general principles and concepts of marketing. The literature review reported here has been an attempt to draw a distinction between marketing of consumer goods and that of services. In doing that an attempt was made to highlight problems associated with marketing of services. Finally a brief overview of previous work on marketing performance evaluation were presented.

The key issues arising from this chapter are that there are clear distinctions between goods and services. These distinctions are presented below:

- (i) While goods are tangible and can be displayed, services are intangible and hence expertise is provided.
- (ii) The traditional marketing mix (promotion, price, product, place) were developed based on the concept of consumer goods. Effective marketing of

services requires more than these traditional mixes. Internal marketing and interactive marketing will need to be applied.

On marketing evaluation, the studies considered point to a relationship between marketing activity (as it manifests itself in planning, or a marketing orientation), and company performance. It must however be stressed that marketing orientation is a by-product of a good manager, i. e. acceptance of the importance of identifying and satisfying customer demand.

Chapter V
Marketing in the UK Construction Industry

Chapter Five

Marketing in the UK Construction Industry

5. 1. 0. Introduction

Marketing as a management function now features, more than ever before, prominently in the formulation of strategies of construction firms and companies. An exploratory literature survey indicated that although construction organisations now recognise to a greater extent the importance of marketing, the approaches followed are still based largely upon very narrow concepts of marketing in a construction context. Furthermore, the survey discovered a paucity of publicly available information on good practice regarding this important function. The primary objective of this research was to evaluate current marketing practices in the UK construction industry. By this objective, the research was aimed at establishing a number of strategic issues and at same time identify activities which offer distinctive marketing features for construction. The discussions in this chapter centre on the findings of the literature survey on marketing of construction services in the UK construction industry. The areas covered by this literature survey include:

- (i) traditional approach to construction marketing;
- (ii) available field studies;
- (iii) management of marketing function; and
- (iv) current marketing practices

5.2.0. Traditional approach to construction marketing

Traditionally, professional firms have obtained new work by being well known in the community and among their professional peers and not necessarily by making overt approaches to potential clients. Contractors on the other hand, relied on the good-will of these professional firms for opportunity to 'third-party' contracts and were therefore reluctant to seek direct contact with clients (Hillebrandt and Cannon, 1990; Pearce, 1992).

According to Hillebrandt and Cannon (1990), contractors' marketing efforts were directed at getting on to tender lists of Central Government, local authorities and nationalised industries rather than seeking work in particular market areas or with particular group of clients. Their marketing behaviour towards the public sector client was replicated with private clients. Thus there was no need for them to put any effort into sophisticated marketing since once on the tender list the dominant decisive factor thereafter would be price. Pearce (1992) observed that, to many construction professionals marketing means building relationship within client and professional circles, while to the contractors it means knocking at the professionals' doors. The general attitude of contractors, he added, had been that good work will attract new jobs and that by moving in the circles in which the clients might be met. This misconception, in his view, does not do well in a competitive business environment. Whilst this traditional approach was acceptable in the past, changes in the construction environment over the past two decades have required both contractors and the professionals to adopt a more strategic approach to marketing of their services in order to ensure competitiveness.

5.2.1. Shortcomings in Traditional Practices

The shortcomings in the way the marketing function is managed in construction organisations has been observed by many construction management writers and researchers. For instance, Hardy and Davies (1984) carried out research aimed at developing a marketing strategy based on the distinctive service industry features. However their search for a distinctive set of service marketing features relevant to construction industry was not fruitful. They observed that few firms rise to meet the challenge for marketing. Some firms, the study revealed, seem blissfully unaware of its existence and this testifies to the low level of interest in marketing methods prevalent in the construction industry.

Fisher (1989) lamented that, to a surprisingly large number, marketing appears to be synonymous with selling, business lunches and concluded that there were a number of

deeply held misconceptions about the appropriateness and value of general management skills, particularly marketing skill. He went on to draw an interesting comparison between the recent attention to marketing education and professional development of the construction profession and the practice in other industries. He observed that while the science and philosophy of marketing is taught as a serious subject to the cream of business management professionals in almost every industry, professional training in the construction industry is limited to technical education¹.

Morgan and Morgan (1990) observed marketing is still a new phenomenon viewed with scepticism. Shearer (1990) highlighted the problem of conceptualising marketing in construction and found a prevalence of the view that it is in essence selling promises because the client is normally being asked to buy something that does not exist. Similarly, Morgan and Burnicle (1991) maintained that the UK construction industry has been slow in adopting marketing principles.

5. 3. 0. Available field studies and investigations

Compared to other management functions in construction, there was no significant interest in marketing prior to the 1980s. However, within the last two decades there have been various attempts at research into marketing in construction. A review of these attempts also shows that virtually all have concentrated on the essence of marketing in construction and industry's perception of its importance.

For instance, Bell (1981) examined and compared attitudes to, and organisation of, marketing within 8 contracting firms. Even though he found 7 out of 8 applying marketing to some extent there was still some confusion about the exact meaning of marketing with only 3 out of 8 giving acceptable definition of marketing. Hardy and Davies (1984) found out in their research that many firms exhibited an indifferent attitude to marketing.

Apart from the conceptual difficulties highlighted from previous studies, construction researchers found inadequacies in construction enterprises definition of marketing. For example, Namo and Fellows (1993) found a wide variety of definitions of marketing even among marketing professionals, and supported their argument with two definitions by Kotler (1984) and Ohmae (1988). Kotler defines marketing in terms of human activity directed at satisfying needs and wants through exchange, while Ohmae saw it as discovering what customers want and orienting the firms to satisfy those wants. Payne (1988) viewed marketing to be the degree of responsiveness of an organization to its market needs.

More recently, Langford and Fellows (1993) classified marketing in construction as essentially marketing of services. In addition to the known services characteristics of intangibility, heterogeneity, perishability and inseparability they identified other sources of problems associated with marketing of construction services as: the need for accountability to third parties; uncertainties regarding the construction client; the necessity for relevant experience; limited differentiation between services; the requirement to maintain quality; turning doers (professionals) into sellers; and limited knowledge of marketing. They suggested marketing strategies for resolving the resultant difficulties arising from the major characteristics of services:

- (i) stress those elements which are tangible;
- (ii) use of personal /contact in preference to non-personal;
- (iii) simulate word of mouth communication;
- (iv) create strong organisational image;
- (v) emphasise selection and training of personnel who will be in contact with the public; and
- (iv) manage customers.

Male and Preece (1994), in an attempt to explore promotional strategy for gaining competitive advantage in construction contractual services, extended those traditional

marketing mix 4Ps (products, price, promotion and place) to include a fifth P (People), referring to the management team and all staff who are involved in the provision of the service product. The focus of the people part of the mix is particularly crucial when they represent construction firms at prequalification presentations and interviews.

5. 4. 0. The Management of Marketing function

Marketing has faced a good deal of skepticism from construction industry members for many decades. Much of this perhaps stem from the composition of the industry, with many of its companies and professional firms having developed from a small family-owned business and although now expanded, still have original family members on board of director (Moore, 1984; Fisher, 1989). These people often have no formal business management training and tend to to be very reluctant to move away from methods that they have always used.

The difficulties met by companies in their attempts to develop and integrate their marketing policy into their strategic planning and to accommodate their marketing activities into their organisational framework, are primarily due to a number of reasons discussed below:

- (i) A major reasons is perhaps that the contractors have never in the past met with difficulties in obtaining the required level of works to maintain survival and profit (Moore,1984, Arditi and Davis, 1988). They are therefore inclined to think that reputation and the quality of their work will continue to win new orders. This situation has, however, change, due to a fall in demand for construction activities; NEDO (1988) predicted fall in demand of between 1% and 7% in 1990 with further slump the following year (NEDO,1988).
- (ii) Several contractors believe that the most important part of the organisation is the production side, i.e, they are production rather than marketing

orientated (Moore,1984; Fisher, 1989; Pearce, 1992). They look for opportunities that fit their capabilities as contractors, rather than adapting their capabilities to suit current and future market opportunities (Pearce, 1992).

- (iii) Another argument is that only clients can create demand for work and they themselves can not do so. There are however a good number of enterprises that are increasingly beginning to put their experiences to use in by venturing into areas such as property development and other joint venture projects with great deal of success.(Bell:1981)
- (iv) One frequently used argument against marketing in the industry is that the nature of the industry is such that it is not capable of being planned. i. e. its dynamic environment prevents any long and medium term planning. (Moore:1984). This argument is invalid as changing environmental factors affect all industries, thereby making planning all the more important so that organisations can anticipate and cope with changes that may affect their business.
- (v) It is also argued that in the past contract are won on price alone, i. e. the company submitting the lowest tender price is awarded the contract (Hancock, 1990). This discriminatory tendering system means that the contractor must price a contract according to the strict specifications of a professional consultant.

As contracts tend to be awarded on price, there is little room for marketing as the contractor is unable to differentiate himself from other competitors other than on price. Hence qualities and capabilities of construction company is unknown before a contract has been awarded as unlike the manufacturing and other industries.

- (vi) Professional education and training have always been streamlined and narrowed down to production of highly scientifically trained professionals from the universities with little or none management training (Harris:1991). These 'traditional self-contained' qualifying courses in the construction industry are no longer adequate.' Gale and Fellows (1990) stresses the need for a more general curriculum of the built environment.

Marketing is a dynamic process and marketing techniques need to change as the buying mechanism evolves through various stages (Gronroos, 1982a). Failure to understand the most appropriate marketing techniques during the different stages may reduce the clients susceptibility to the marketing initiative, or possibly destroy the chances of of the company winning over a particular client. Every potential market should be quantified. The build up approach, (where the company executives use their intuition and historical data in their possession), will probably be the best.

Gronroos (1982), observed that clients will always look at the product of functional quality, technical quality, and corporate image (total quality) to assess a service company by comparing the the total quality of a company with its competitors. This comparison may be determined by subjective criteria. The more successful companies will endeavour to discover what subjective criteria potential clients consider important. It may be more beneficial for the company to carry out self appraisal of factors of total quality prior to undertaking client survey.

Systemised approach to marketing, Arditi and Davis (1988) suggested, may result in an orderly and efficient approach which may be appreciated by clients and avoid the necessity of broad statements of "how good we are", in any promotional literature, which may seem ambiguous to clients. Lastly, they argued, in order to take these conclusions and improve marketing effectiveness out of them, the company would need to plan. Company plans will be required to ensure that all managers in the company are clear on the objectives and goals of the company.

Today, however, the scope of marketing in the construction industry is becoming wider. There is no longer only the traditional form of tender, where a contractor prices specifications set by a consultant. There are now other procurement systems which are gaining wider acceptance throughout the construction industry namely (Hillebrandt and Cannon, 1990, langford and Fellows, 1993):

- (i) Design and Build;
- (ii) Management Contract;
- (iii) Total Build Projects.
- (iv) Negotiated contract

The peaks and troughs of construction activities of the 1980's and the recent prolonged economic recession has brought about a significant change in the attitude of professionals in construction industry towards the issue of adopting marketing as management function in the industry. Many construction enterprises now have marketing department to guide them towards becoming efficient at maintaining their existing clients and winning new contracts. This is in contrast to traditional practice where the professionals led the industry's systematic external efforts to obtain work while the contractors depend so heavily on the good will of the professionals that they were reluctant to take any step that the professionals might see as potential threat to their monopoly (Pearce:1992).

5. 5. 0. Current Marketing Practices

Organisations in the in the UK construction industry are beginning to adopt marketing for a number of reasons, including variations in workload, an unfavourable supply and demand position and changing markets within the industry (Moore, 1984; Fisher, 1989; Morgan and Burnicle, 1990; Morgan and Morgan, 1991). For many decades, marketing was seen by many in the UK construction industry as irrelevant on the belief that good quality of works will attract new orders. Consequently marketing is less well developed

and is being performed in most construction firms on an *ad hoc* basis. Construction firms' marketing strategies simply emphasise technical service excellence and professional reputation, the image of the firm and personal contacts by staff (Morgan and Morgan, 1991). Construction industry is a service industry engaged in the production of physical goods. However, with increase in competition, rise in cost, falling productivity, and fall in service quality, there is need for more sophisticated marketing approach.

Marketing strategy, as currently employed in the construction industry in general, is in a tactical sales and advertising rather than in a strategic role where it has more potential for effective competitive strategies and development of client-orientated business (Morgan and Morgan, 1990). In several companies within the construction industry, marketing is still seen as an extension of, or part of responsibilities of operations managers or other specialists rather than as an independent function (Fisher, 1989; Pearce, 1992; Yisa, Ndekugri and Ambrose, 1995).

Jepson and Nicholson (1972), while discussing marketing strategy in the context of construction industry, commented on the role of marketing as that which entails the examination of alternative prospects and the consolidation of a position within the markets. Translated into tactical format, they see the central role being the development of relationships with prospective and existing clients.

One of the objectives of this research was to identify a wide range of marketing practices as currently employed by construction firms. A review of literature on marketing strategies for construction services has shown that for the past two decades, changes in construction industry have resulted in a subtle reshaping of the scope of marketing in the construction industry. These activities are concerned with aligning organisation's business objectives with those of the client and to ensure that the organisation is well placed to take maximum advantage of changes in the business environment.

Marketing is now included in the general texts of construction management (Calvert: 1981,

Jepson and Nicholas: 1972, Harris and McCaffer: 1991, etc.). Calvert (1981), sees marketing in the construction industry as involved in the following areas:

- (i) Product - what type of construction - civil engineering or building
- (ii) Customer - public sector, private house buyer, corporate clients, consultants, or speculators.
- (iii) Distribution - geographical development of order book
- (iv) Price - identification of most profitable segments
- (v) Promotional activities - mix of media and use of public relation consultants.

Jepson and Nicholson (1972), while discussing marketing strategy in the context of construction industry, commented on the role of marketing as that which entails the examination of alternative prospects and the consolidation of a position within the markets. Translated into tactical format, they see the central role being the development of relationships with prospective and existing clients.

The Institute of Marketing Construction Industry Group (1974), suggested methods of introducing the '*marketing concept*' into the construction companies. They advocated Corporate Audit covering:

- (i) Management and Organisation: structure, ability
- (ii) Trading: analysis of completed projects, operating ratios.
- (iii) Markets and Marketing: market size, growth, segmentation.
- (iv) Technological Skills: human skills, research and development
- (v) Physical Resources: property, plants, stocks.
- (vi) Employment practice: recruitment, remuneration, labour relations.

5. 6. 0 Marketing Activities

Arditi and Davis (1988) described marketing as consisting of activities concerned with finding new markets; evaluating job potentials; establishing contacts with potential clients; gaining information regarding market conditions; potential customers and projects; prequalifying with clients; estimating project cost; submitting proposals; entering into contracts; negotiating changes and claims; and developing new technology or different contract forms. A number of those activities are discussed in the following section and they include: market research; product/service research; price/fee strategies; corporate identity programmes; advertising; public relations; personal selling; information services; strategic alliances; publications; conference and exhibitions; sponsorships of events; and support of employees.

5.6.1. Market research

The task of market research is to help reduce uncertainty in decision making by supplying and specifying accurate market information in order to establish the size, structure, and profitability of the market. The construction industry is not known to be a research orientated industry. Recent figures show that only about 0.01% of its annual turnover is invested in research and development in the UK construction industry while competitor countries are investing up to 2% of their annual turnover. (Gale and Fellows: 1990). Most consulting firms rely on the traditional method of invitations to tender by construction clients. Market research is only considered to relevant to forecasting demand and, as Calvert (1981) noted, to discover whether the anticipated building pattern is compatible with the company's resources, expertise and experience.

5.6. 2. Products/Services research

Products or services play very important role in the construction industry. The industry places great emphasis on quality of service and construction works, with the realisation that sub-standard work and unsafe site organisation will not lead to new orders. It is also very easy to recognise bad performance, and bad performance has a long term effect on the

company concerned. In fact at the moment many contractors believe that good performance will lead to new orders from clients. Many companies use product or services research to analyse competitors and their services and also to investigate failures and success and to try out new methods of construction. Service element in market in construction market mix ranks very high.

5.6.3. Price/fee strategies

In most industries, price/fee structure is fixed by producers while in construction industry it is determined by the market-place clients. Pricing in construction industry is done on '*cost-plus*' bases and in line with competitors prices, and not according to what the market will pay. In efforts to win contracts, contractors often reduce their prices to the barest minimum below which they will make losses. In other words, a contractor who wins a contract is also the nearest to making losses.

Price strategy, modified contracts, alternative additional services are means to obtain a contract or to modify a proposed contract to give the company a competitive advantage. For example, alternative design may suggest to the client improved or more economical ways to complete the project (Nair, 1986). Joint ventures may allow the contractor to temporarily expand his services or expertise to be more competitive (Schiffman, 1986; Young, 1992). Offering additional services such as construction, architecture and engineering, feasibility studies, or financing research may give the contractor advantages or may even exclude others from the contract (Arditi and Davis, 1988). As far as price strategy is concerned a firm may use as bidding strategy, like offering discounts, guarantees, or low basic prices on selected services (Gerwick and Woolery, 1983).

5.6. 4. Corporate Identity Programmes

The primary objective of corporate identity programmes is to develop a corporate reputation visibility which communicates the company's intent, its beliefs and the main direction of the business (Arditi and Davis, 1988). According to Friedman (1984), it signifies a single, unified and solid corporation, modern management, up to date

technology with purpose and direction. Construction firms promote their corporate identities through logos on letter headed papers, envelopes, vehicles and plants, T-shirts and fencings on projects sites.

5.6.5. Advertising

Advertising is necessary to convey a message about the company to existing and potential clients. Unlike the consumer marketing that places great importance on advertising, as regularly seen in newspapers, magazines and television, the construction industry spends very small amount of its budget on advertising (Arditi and Davis, 1988). They are not directed at the general public, but to a specific audience, hence the choice channel of advertising is influenced by the size and type of target audience (Morgan and Burnicle, 1991). There is however, a general believe that the consulting firms need to sell themselves to the existing clients as a means of reminder and at same time to potential clients through advertisement (Namo and Fellows, 1993). There are many avenues available for consulting firms to advertise their firms and the kind of services they offer through trade magazines, professional journals or direct mail sent to companies (Fisher, 1989; Pearce, 1992; Friedman, 1994).

5.6. 6. Public Relations

Corporate advertising is similar to public relations (PR) in its aims, but different because it uses paid advertising methods (Fisher, 1989). In general terms PR refers to the communications and relationships between a firm and its various publics(Morgan and Burnicle, 1991).

The primary objective of public relations in any organisation is to develop business contact with potential clients (Pearce, 1992). Public relations embraces many aspects of an organisation's activities and aims at creating a good public image. There is an increasing importance attached to public relation (PR) in consulting firms. There are various methods of PR employed amongst consulting firms, such as press releases, annual reports,

corporate identity, media, company newsletters, speeches, and charitable donations. PR is well developed amongst consulting firms (Moore, 1984).

5.6.7 Personal Selling:

Development of relationship between the client and offerers of construction services is considered a key factor to success in construction business. Personal selling entails a 'face to face' interaction between the firms sales people and the client or potential clients. Fisher (1989) regards personal selling process as an intrinsic part of the selling process for two reasons. First to create interest and awareness of an organisation's product/service offering. Secondly, as a channel for providing or reinforcing precise information or solution to specific marketing needs. Personal selling is concerned with *marketer-customer* relationship and managing of level of awareness in customers or clients.

5.6. 8 Information Services

Marketing staff in construction firms spend a large proportion of their time on fact gathering. For marketing planning to be effective, marketing planners need good access to information obtained from a carefully designed information system. Information systems in construction involve gathering information on clients, competitors, government policies and the firms position relative to other competitors (Arditi and Davis, 1988; Fisher, 1989).

Information services have become a strong marketing tool as information technology makes expertise more widely available, possibly through expert systems and consequently, the same technology holds out the possibility for firms to enhance greatly the quality of the services they have to offer (Barrett, 1993). It is now possible to make phone calls, link up with computers any where, manipulating existing data, and make quick and accurate responses to clients request. Information services in construction provide information towards a selected group of clients on a regular basis. A good example is *ENR-On- Line Electronic Marketing Services* which provides leads to potential projects based on notices of projects and public or private sources for contractors in the United State.

5.6. 9. Strategic Alliances

Traditional practice of construction firms has largely been to enter a business on an individual basis. The growth and development of multinational and conglomerates have typified this approach (Moodley, 1994). Corporative relationships were seen as second best to the option of going it alone. The difference with the current trend is that co-operation is present at all stages in the value chain. These relationships are not restricted to only vertical relationships (contractor-client relationship) but to horizontal relationships (between construction enterprises themselves) as well.

The emergence of 'project partnering', 'preproject proposals' and 'joint ventures' suggests that downstream alliances with clients are possible and desirable to both clients and construction firms. The greater integration of contractors and the clients represents a means of advantage over competitors for both groups. A longer term outlook to contractual relationships provide opportunities for added value (Moodley, 1994).

5.6. 9. 1. Pre-project proposals

In industrial markets, buyer-seller relationships have typically involved relatively long-term contractual commitments, but even here the relationship is often arm's length and adversarial, pitching the customer against the vendor in battle for low cost (Webster, 1992). Because of ever increasing competition in the industry, 'pre-project proposals' have become increasingly prominent marketing practices between firms and those clients with which a long time relationship has been established. In the cases where this long-term relationship has been established, contractors and professionals alike do monitor the progress of clients and present proposals for expansions. Where it has been successfully employed, it has been advantageous at presentation during prequalifying interviews and contract documentation. Pre-project proposals also provides an opportunity for construction firms to promote new innovation and creative ability.

5.6. 9. 2. Joint ventures

A joint venture according to Young (1992), is a strategy available to an organisation which can be used to undertake a project that could otherwise be beyond a single company's financial or production capabilities. It is considered as a means of diversification. It allows companies to improve communications, acquire capital and technology, to develop new products and penetrate new markets, to globalise operations and to minimise risk and enable cooperating firms to compete favourably with larger firms (David, 1991). A good example of joint venture is the Channel Tunnel.

5.6.10. Publications and brochures

Publications fall into three categories, namely:- Reports and annual accounts, brochures, and professional articles. Publication of company's reports and accounts is a statutory requirement. It is a useful tool for carrying a strong message about the scope and success of current activities of an organisation. Consulting firms have used this avenue with some success in promoting themselves. These reports are made widely available and distributed and in some case published in some papers and magazines.

The second category of publications is the use of brochures. Brochures are features of modern business activities, needed to support business operations. Brochures contain brief history of the firm, resources and achievements. In construction industry the essence of using brochure is to show how the client benefited from the company's services. The use of brochure is a well established method of business promotion by consulting firms.

The third aspect of publications is use of professional articles by the firm. This is a very powerful and cost-effective method of publication. These articles are usually published in professional journals and are very educative.

5.6.11. Conferences and Exhibitions

Conferences are good avenues for promoting individual firms and their activities through interaction with potential clients such as professionals in the civil service or advisors to potential private clients. Professional conferences are held annually and some case

quarterly. Construction firm can always promote themselves through literature distribution, seminar presentation at the conference, etc.

Many exhibitions concerned with construction industry are held annually in the UK, whereby many organisations concerned with construction activities are represented. Many firms obtain stands at such exhibitions for purpose of displaying their activities such photographs of projected completed and those still in progress. Brochures and other literatures can also be distributed at such occasions. Some firms go as far as showing firm at exhibitions.

5.6.12. Sponsorships and Invitations to Sporting Events

Construction firms are some times invited to sponsor some events such as raising funds for charity, donating some prizes at some sporting events or some community development projects. Sponsorship is a form of advertising and it is a good way of promoting an organisation's name.

Apart from sponsorships of events, there are other opportunities for construction organisation just like any other business organisation to obtain debentures entitling them to reserve seat at sporting events for the purposes of entertaining friends or clients. Though this aspect of promotions is not expected to unduly influence such friends or clients in their workday life, it helps to strengthen friendship between the marketers and the clients or friends.

5.6.13. Support and Participation of all Employees

The education, support and participation of all employees in the marketing plans is important to its success. Gerwick and Woolery (1983) emphasised that the owner wants to know the persons who will actually be responsible for completing the project. The project manager, the foremen, field engineers and schedulers are important to the owner as their professionalism in documenting work problems helps ensure good relations (Arditi and

Davis,1988).

However, as most construction management personnel have either worked their way up from the trades or started with an engineering education, they possess little, if any business or marketing tradition.

Ability of an organisation to set objectives and assess them from time to time is a very important marketing mix. It is important of assess the strength and weakness and relate them to set objectives in terms of resources, skills, experience,equipments, finance and expertise within the organisation. Many construction firms have done considerably well in terms time and money put into staff training to ensure that employees have sufficient knowledge of latest construction techniques and safety regulations. Unfortunately staff training is is restricted to technical aspect of construction (Fisher, 1989)

5.7.0 Summary

Organisations in the construction industry have adopted marketing for a number of reasons, including variations in workload, an unfavourable supply and demand position and changing markets within the industry. Construction industry is essentially a service industry and faced the same problems often encountered by others service industries. Stanton (1981) identify four major problem areas in the marketing of services, namely: intangibility of services; inseparability; perishability ; and heterogeneity. Consequently marketing is less well developed and is being performed in most firms on ad hoc bases. Morgan and Morgan (1991) found out that construction firms' marketing strategies emphasise technical service excellence and professional reputation; the image of the firm and personal contacts by staff are very important.

Chapter VI
Current Trends and Changes in the Construction Industry

Chapter Six

Current Trends in the British Construction Industry

6. 1. 0: Introduction

That fact that marketing is a less- well developed management function in the UK construction industry has been emphasized in Chapters 1 and 5. Several reasons for this lukewarm attitude of the industry to marketing in general are given in Chapter 5. It was then mentioned that several changes over the past two decades have forced many firms in the industry to reconsider improving ways by which their business will survive and become more competitive. In this chapter the major trends and changes in the industry and their implication implication for marketing of construction services are examined.

Change often requires an adjustment of roles and relationships within the organisation if demand is to be met. Although potential demand may not be as obvious as immediate demand, it may be stimulated - the skill is to convert the potential to real demand. A logical approach is to : identify a need (demand); evaluate the scale of the need and the likelihood of satisfying it at a profit; plan how demand can be satisfied; and implement the plan ; ie., marketing. Marketing is thus identified as a central function crossing all internal and external boundaries.

The ability of the construction industry to innovate and manage change has been widely debated over the years (Lansley, 1987; Gale and Fellows, 1990; Betts and Ofori, 1992). A whole range of factors within the environment of the construction firms have changed over the last 20 years in such a way that the combined effect has been for construction firms to move away from their traditional modes of operating to a more business-like approach (Barrett, 1993). In order to solve the many new and complex issues which confront management teams in the construction industry, they need to develop and demonstrate a wide range of reasoning and problem solving skills. One of the prime requirements is to be able to realign limited physical, technical and human resources to meet rapid changes in the

construction markets and the preferred procurement methods of clients (Lansley, Quince and Lea,1979). Such flexibility requires highly innovative and creative problem solving skills as well as organisational structures and managerial value systems which supports and encourage the development of such skills (Peters,1988; David,1991; and Nystrom, 1978).

The areas of changes examined in this chapter include: structure of the industry; fluctuation in workload; construction clients; procurement systems; formation of cross-boarder trading blocks; competition ; development in technology; and education and training. However, to begin with, an overview of the concept of change and innovation is presented in the following section.

6. 2. 0: The Concepts of Change and Innovation

The external, social, economic and political environments , provide an opportunities for work and thereby potential profit. Clients' needs and attitudes like the external environment itself are never static and therefore organisations need to adapt and respond to these fluctuations. Situated between the external and internal environment of an organisation and operating at the boundary of the organisation is the marketing function. This chapter evaluates the role of marketing in seeking to regulate the construction organisation's relationships with changes within the industry and its external environment.

Flexibility and diversity are needed to provide favourable conditions during the initial stages of creative process and for exploring new areas in company problem solving (Lansley *et al* , 1979; Kanter,1988). Peters (1988) proposed two ways to respond to an era of sustainable excellence. One he says is frenzy: buy and sell businesses in brave hope of staying out in front of the growth industry's curve. The second strategy is meeting uncertainty by emphasising a set of new basics: world class quality and service, enhanced responsiveness through greatly increased flexibility, and continuous, short-cycle innovation and improvement aimed at creating new markets for both new and apparently mature

products and services.

The total scope of what needs to be done is highly variable, in large part, because it depends on the particular organisation and industry. What is clear is the need for innovation at every level - innovation not merely in the traditional sense of new products and services, but in the very ways that organisations operate, in their view of themselves, and in the mechanisms that can develop and engage their resources to the maximum extent possible (Kanter, 1988). Externally inspired opportunities must be matched by internally created capacities. One primary concern is with the ways in which organisations can most clearly identify their current position and the extent of their marketing capability. The starting point in this process of strategic marketing analysis involves a detailed marketing audit and review of marketing effectiveness of the organisation.

It is relevant here to say that management thinking has come a long way and has developed to a stage where behavioural influences are perceived to have fundamental impact on organisational climate. Aspect of leadership style (Adair, 1983), communication (Kemp, 1973) and marketing orientation (Wilson, Gillingan and Pearson, 1993) have profound impact upon this 'climate' which in turn conditions the organisation's response to a changing external environment. Thus the level of achievement of any organisation to market or sell what is essentially a service to potential clients is conditioned by the internal climate created by its management. This internal climate largely conditions the manner in which the organisation copes with and adapts to the external environment. Client needs and attitudes like the external environment itself are never static and therefore organisations need to adapt to these fluctuations.

6.2. 1: Response to Change

The internal dynamics of an organisation in responding to change, and itself changing its structure and orientation to reflect and be able to initiate change in the external environment, are very important to the organisation's development (Nystrom, 1979). Deciding whether to

avoid or to invite a radical change is the major strategic issue facing an organisation. Kanter (1988) opined that organisations need innovation to shift from the present tendency to deal with the tasks in a relatively single-minded, top-directed way and to a capacity to respond innovatively, locally, and promptly to a whole variety of organisational contingencies. The organisations emerging as successful will be above all, flexible. They will need to be able to bring particular resources together together quickly, on the basis of short-term requirements and the necessary capacities to deal with them.

The construction industry faces continuous circle changes in workload, in work mix and in the method of managing the changes (Hillebrandt and Cannon, 1990), and by definition changing its product all the time. One of the consequences of these many changes is that the construction firms are moving closer to their clients who are themselves becoming more sophisticated and often now the driving force for improvements in construction process.

One clear evidence from these changes is that of increasing competition amongst construction firms (Betts and Ofori, 1992), while at the same time the industry experiences continuous decline in construction output (NEDO, 1993) as consequences of a prolonged and punitive recession. It should however be noted that the concepts of competition and marketing are closely related. While competition stimulates invention, development and efficiency, developments in marketing has to a great extent been helpful in postulating the appropriate direction of relationship between demand and supply which in turn affect the analysis of competition.

6. 3. 0: Current Trends in the Industry

As an industry which is often used to regulate the economy as a whole, the construction industry has hardly been static (Moore, 1984; Fisher, 1989; Huru, 1992). There has been numerous significant changes in the UK construction business in the past two decades. These changes have demanded different corporate strategies which in turn have required firms to structure their operations in different ways, for their senior managers to adopt

different styles and for management teams to draw on different problem-solving skills. While some firms have been very successful in responding to changing needs and opportunities, using technological innovation and contractual development to provide competitive advantage, others have failed for being static. On management of change, Lansley (1987) lamented that, the ability to distinguish between effective and ineffective firm in terms of how far management of change by any firm has enhanced the overall capability of the industry has been dependent on the ability of the clients and that the desire for the firms to change has come more from a fear of being left behind by competitors than from a belief in the benefits of innovation. Lansley (1987) views these changes in terms of the nature of effect on the business and classified them as operational, competitive and strategic changes (See also Sadler and Barry, 1970; Eppink, 1975; Lansley et al, 1979).

Operational changes ,Lansley (1987) said, are familiar having predictable outcomes and do not lead to any permanent changes in the relationship between the firm and its environment. These can be handled by routine preprogrammed responses based upon experience. The strength of the firm which exists in an environment characterised by operational change will be enhanced by improving the routine systems, procedures and skills which enable it to handle such changes. Competitive changes on the other hand, are long-term and subtle. They lead to changes in structure of the industry and in relationships between firm and its environment. In an environment characterised by competitive change, greater emphasis needs to be placed on creating systems and procedures which can develop slowly in sympathy with incremental changes in the environment, and ensuring that skills are updated regularly and appropriately. And lastly, strategic changes are sudden , unexpected , unprecedented and are outside the experience of the firm. They lead to permanent transformations and require rapid and creative responses and necessitate the development of new linkage s with the environment, i.e. strategic responses. The demands placed on the firm by strategic change is for systems which can support the creativity and responsiveness needed to generate new concepts of business services.

While the environment of the 1960s was characterised by long-term stability (Lea, Lansley and Spencer, 1974), the early 1970s, Lansley (1987) recalled, saw major changes in the business environment of the construction industry, the three day week (1972), the building strike (1972), the oil crises (1973), the moratorium on public expenditure (1975/76) and the sterling crises (1976). The study by Lansley et al (1975) suggested a need for control, integration and boundary regulation upon the organisational model of Burns & Stalker (1961), management style based on the work of Sadler & Barry (1970), amongst others, which incorporates production, and corporate orientation features.

The 1980s saw a change in attitude amongst major clients who are determined to exercise greater control over the construction process. Cost inflation, disharmony amongst construction team members, excessive project times and poor quality, characteristics of the 1960s and 1970s, were no longer to be tolerated. Furthermore, the margin between a viable and non-viable investment has become narrower (Lansley, 1987); previous experience with the industry, especially in the area of quality, have been disappointing. Bennett *et al* (1979); and Flanagan *et al* (1986) have drawn the unfavourable comparisons between the UK construction industry performance and the industries of other countries. Likewise, according to reports published by British Property Federation (BPF, 1983), bodies representing corporate clients and consumer bodies have increasingly challenged the methods by which the industry operates.

The major mechanism therefore open to individual firms was to improve the organisational climate and their efficiency (Lansley, 1987). The fluctuations in output were inevitable because of changes in economic fortunes which affected both internal and external events in the industry. More recently, the downturn in the British economy and worldwide recession have raised the question of how turnover and profitability can be improved by the construction company. The case of adopting marketing in the industry started receiving attention in the 1970s with the realisation that continuous survival depends on securing adequate workload through appropriate marketing strategies (Bell, 1981; Hardy and Davies, 1984). The start of the 1990s saw another circle of changes, include those affecting

the structure of the industry, procurement methods, construction process, client organisations, technology, political and economic environments.

6. 4. 0. Changes in the Structure of the Industry

Several changes relating to the structure and composition of the UK construction industry have continued over the past two decades. First, is the fragmentation of the industry which has increased over the past decade with the wide spread and growing use of sub-contractors. the number of directly employed operatives and administrative, professional, technical and clerical staff has declined remarkably. In 1977, 1.3 million were employed but this declined to fewer than 1 million in 1987 and yet further to 985, 000 in 1990 (NEDO, 1991; Department of Environment, 1991). The move from employing direct labour to self-employment accelerated during the recession of the early 1980s and again in 1990 as firms shed directly employed workers and turned on labour-only, or supply-and-fix subcontracting, to reduce overhead costs. Thus the number of self-employed holding 714 certificates in the construction industry rose from 155,546 in 1977 to 410,493 in 1987 and then to 720,000 in 1989 (Gann, 1992). Associated with this shift has been an increase in the number of small firms.

Between 1980 and 1994 (Figure 6.1) the firms employing between 1 and 14 employees have risen in number by almost 50%. During the same period the number of those employing between 15 to 114 fell by 20% while those employing between 115 to 599 and 600+ have both fallen by 33% and 25% respectively over the same period (NEDO, 1993).

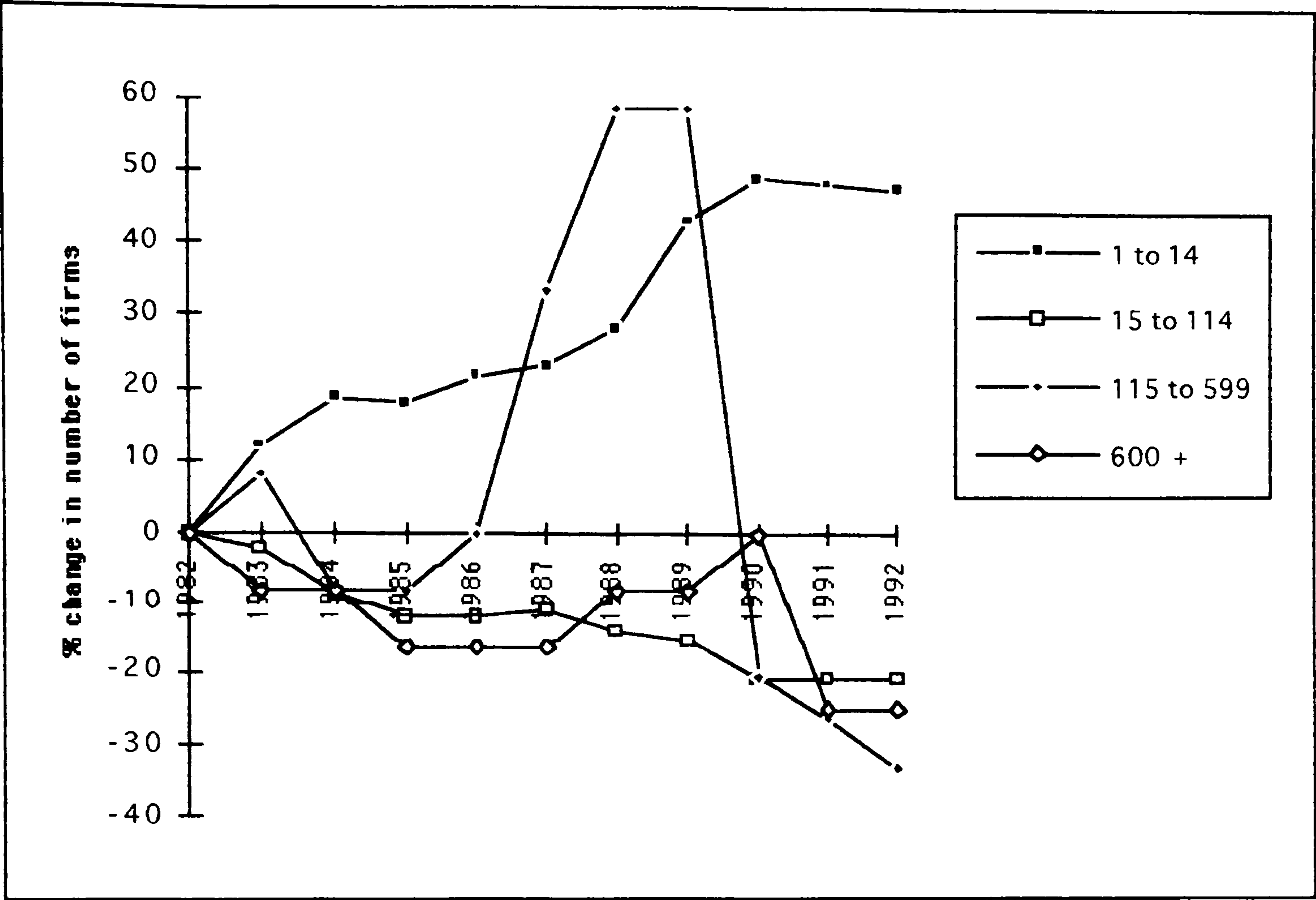


Figure 6.1. Cumulative percentage changes in number of firms by sizes of employees

Source: Housing and Construction Statistics; A quarterly bulletin of DoE, December 1993

Another important contributor to structural change as brought about by the recession was insolvencies of construction firms. Between 1982 and 1986 the number of construction self- employed firms that went bankrupt fell from 18.4% to 11.8% (a 7% fall in number) of total. During the same period, the percentage of total number of large companies facing liquidation rose from 11.8% to 13.3%. The percentage of self-employed bankruptcies rose from 11.8% in 1986 to 20.3% in 1989 and fell again to 14.6% in 1992. On the whole there was 4% fall between 1982 and 1992. During the same period percentage of large companies that went into liquidation rose from 11.8% to 15.7% (4% rise)

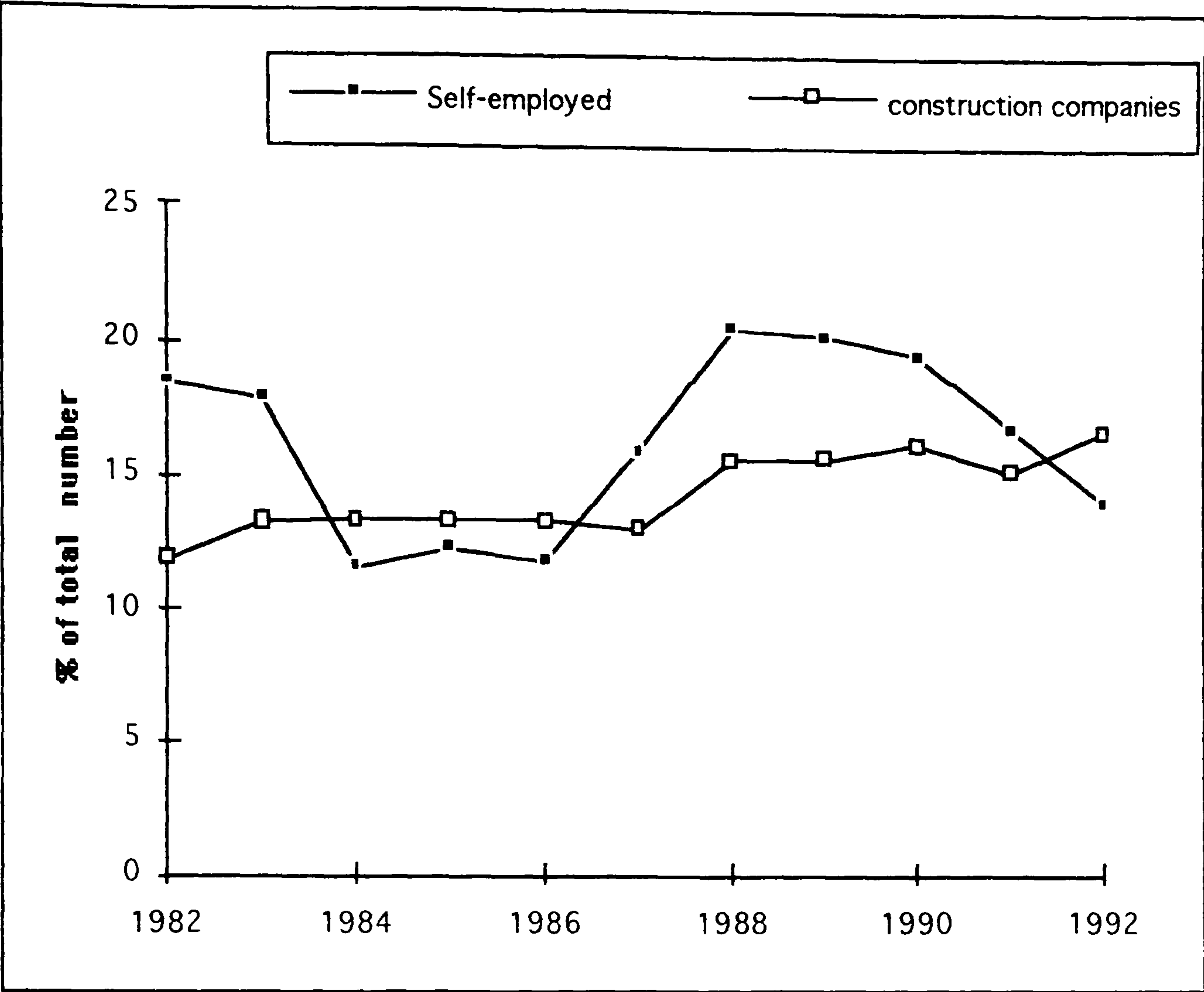


Figure 6.2 Insolvencies of construction firms (bankruptcies, deeds of arrangements, compulsory and creditors voluntary liquidations) 1982 - 1992.
Source: Housing and Construction Statistics; A quarterly bulletin of DoE, December 1993.

6.5.0. Fluctuation in workload

A feature of the construction industry is that its workload is cyclical, very susceptible to the fortunes of the economy and volatile. For example the industry experienced nine years of growth from 1980 to 1989 which was mostly generated by the private sector. The share of new work for private clients rose from 58 per cent in 1979 to 78 per cent in 1989, changing both overall composition of construction output and the nature of the construction market (Forster, 1991). However, more recently the industry has been severely affected by recession. At the beginning of the 1990s the outlook for the construction industry was not very promising and the total construction volume fell in 1990 and 1991 (Huru, 1992).

6.5.1. Construction Orders

Figure 6.3 shows the value of percentage changes new orders obtained for the period between 1982 and 1992. The figure shows a steady increase in new orders obtained by all the categories of sizes of firms from 1982 to 1990. For example, new orders obtained by large firms (employing 600 +) rose by almost 150% over the value of 1982 order in 1990. Likewise new orders obtained by firms employing 114 to 599 rose by about 100% over the same period while those obtained by 1 to 14 and 15 to 114 categories rose by 120% and 74% respectively. These orders fell sharply in 1991 and since 1991 new orders obtained by larger companies have continued to fall while those obtained by small firm have shown upwards trend.

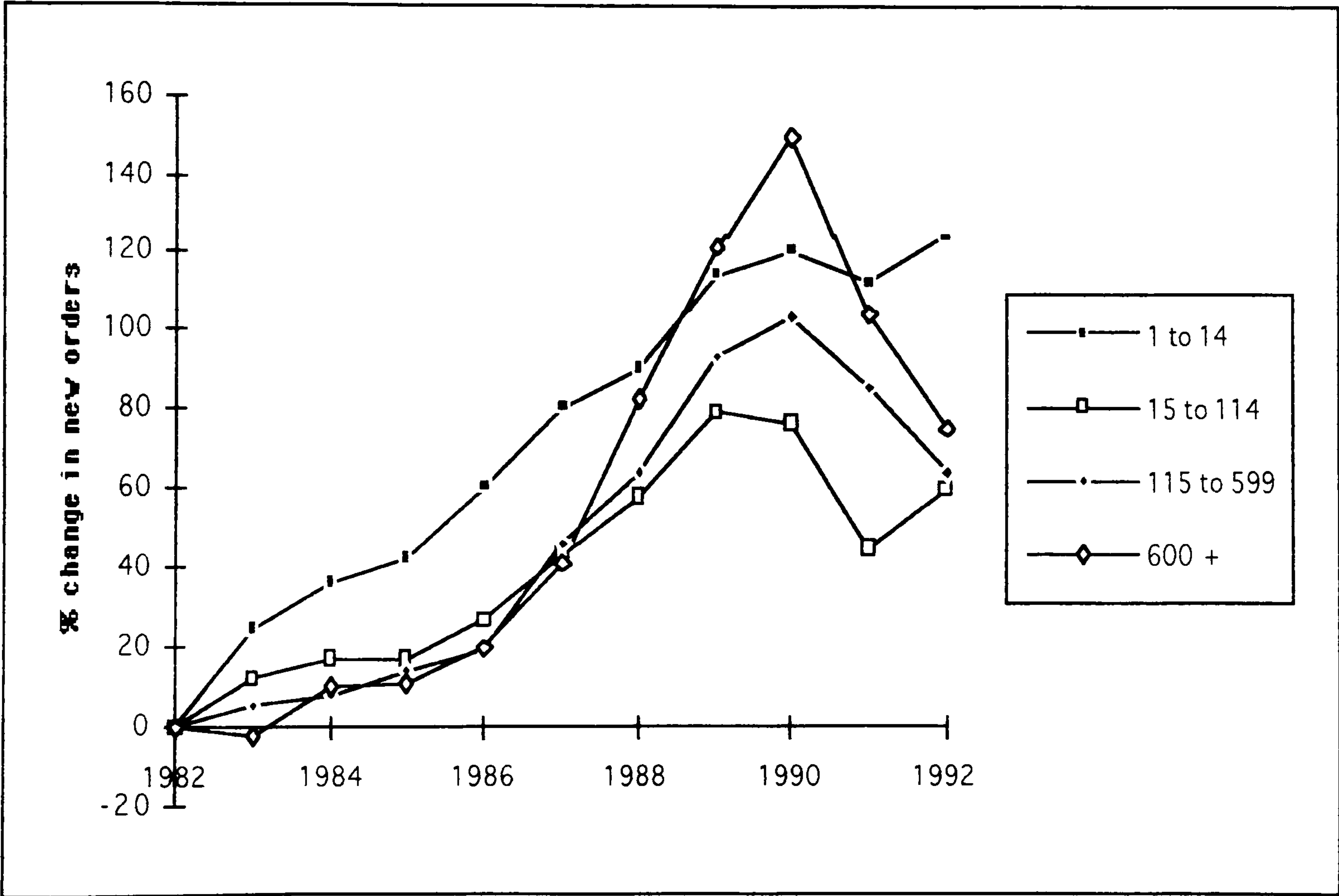


Figure 6.3: Cumulative % change in new orders obtained by sizes of firms between 1982 and 1992
Source: Housing and Construction Statistics; A quarterly bulletin of DoE, December 1993.

6.5.2. Construction Output

The near-continuous boom enjoyed by the construction industry from the early 1950s, according to Hillebrandt and Cannon (1990), came to an abrupt halt in 1973 with the first oil crisis. During this period, the total workload of the industry doubled. This fell by 22 per cent by 1981. and according to official statistics (NEDO:Dec.1988, *Housing and construction statistic*,Dec. 1993), this volume did not reach its peak again until 1988. (see figure 6.4).

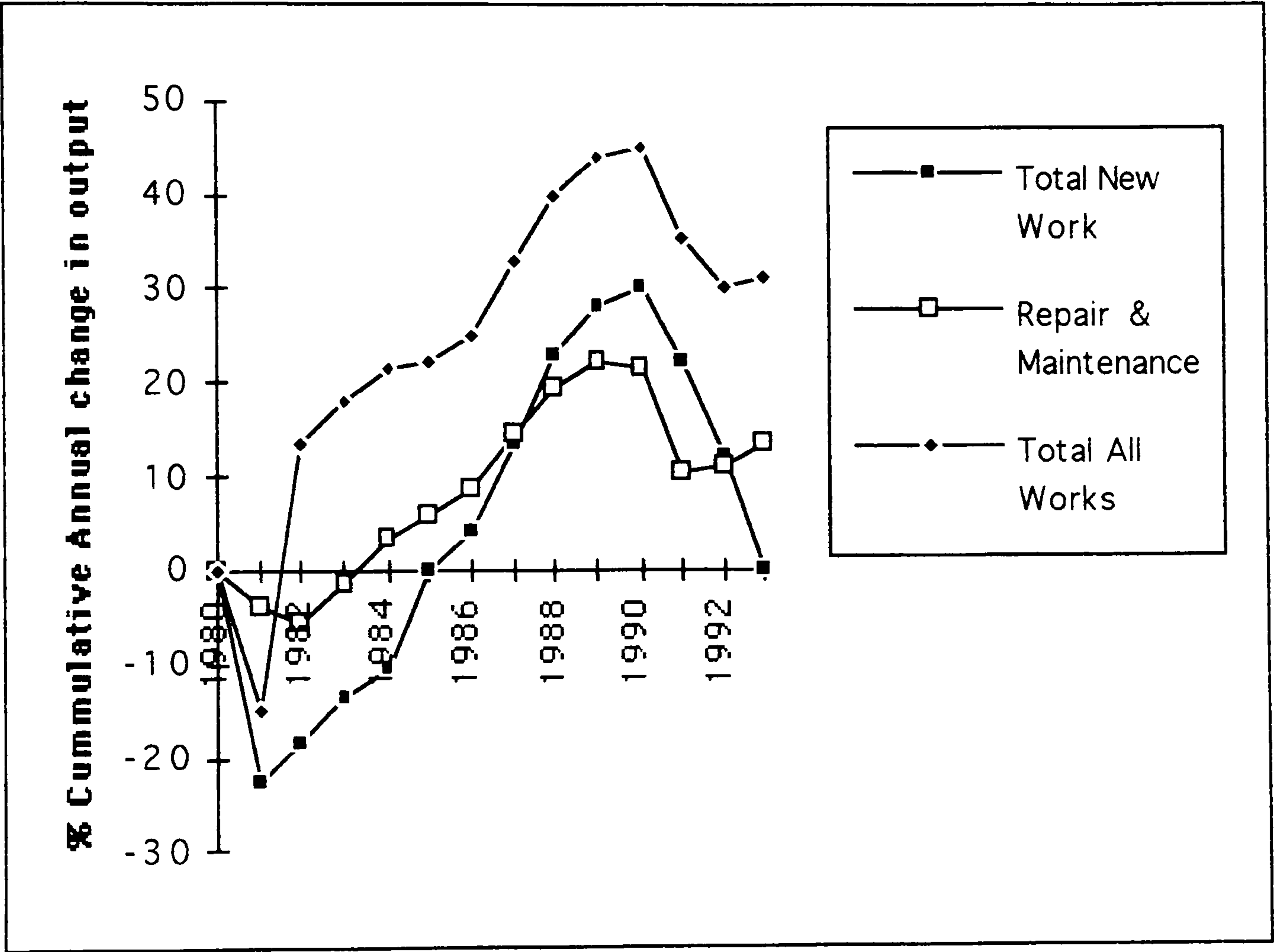


Figure 6. 4 . Fluctuation in construction output illustrated in cumulative annual percentage changes (1981-1993)
Source: Housing and Construction Statistics; A quarterly bulletin of DoE, December 1993.

As shown on figure 6.4 the total output fell by 15% between 1980 and 1981. This figure then rose steadily to 22% in 1984 with a slight fall of 5% in 1985 and continued to 1986. Between 1987 and 1990 the volume construction output increased by 15 % above the 1986 figure. This figure fell by 10% in 1991, with a further 5.5% fall in 1992 bringing the

output marginally below the 1987 volume. The figures for 1993 show no sign of recovery

5.5.3. Overseas Works

Figure 6.5 shows the balance between total construction order obtained by the UK firms and the orders obtained from overseas markets between 1982 and 1992. The UK construction industry depends on overseas works for about 10% of its total output. Total new orders rose from £11.5 billion pounds in 1982 to over £28 billion in 1987, an increase of about 140% over the 1992 volume (Figure 6.5). This figure fell to £17 billion by 1992 (80% fall in order). Figures 6.4 and 6.5 also show the volume of overseas order over the same period. Cumulative percentage increase in the volume of overseas order obtained over the same period was just 3.6% above the 1982 figure.

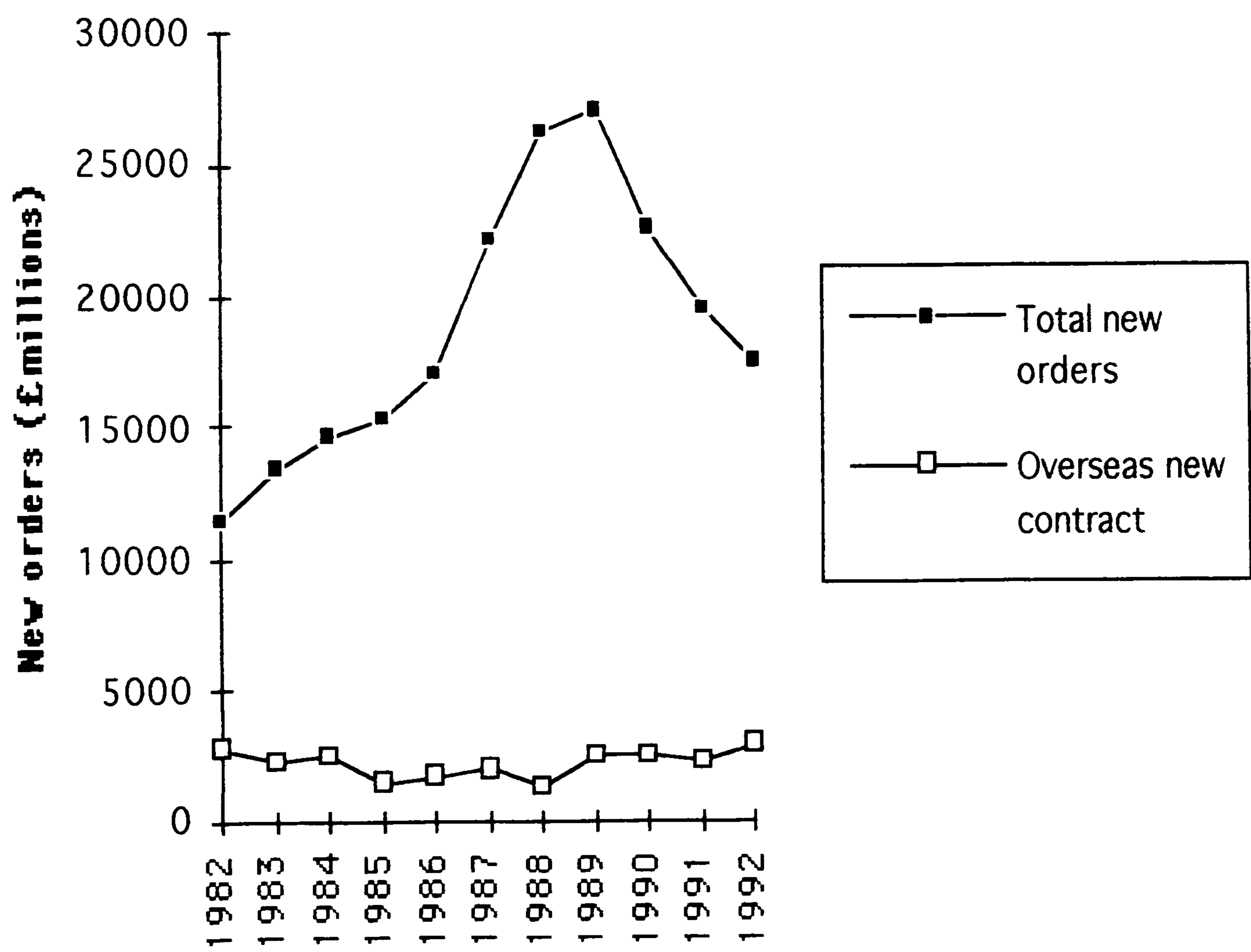


Figure 6.5: Total construction order compared with overseas new orders (1982 - 1992)
Source: Housing and Construction Statistics; A quarterly bulletin of DoE, December 1993.

According to Langford and Male (1992), the balance between overseas construction activities and domestic markets masks the highly turbulent state of overseas markets. Foreign companies they added, have seized opportunities presented by the manpower shortage of the late 1980s and the UK has imported materials and expertise from many parts of the world. The contracting part of the industry has thus become highly competitive.

6.6. 0. Construction Clients

The 1980s saw the beginning of rapid privatisation of government enterprises in the UK allowing for greater competition. There has been an increasing rise in the number of private and commercial developers, and housing associations. Further to this, many like the NHS, prison services and schools are increasingly acquiring trust status, as a result of which they are now becoming self governing with very little central control. Their new developments are designed along private sector lines. For such services, Langford and Fellows (1993) observed, emphasis are placed on speed, value - based services and cost - time - quality performance for a particular project. They predicted that these clients will become more experts and increasingly involved in building process, while relationship with contractors will move towards more of partnering and package deals will become more prominent.

The result of rapid privatisation of government enterprises in the UK allowing for greater competition has been an increasing rise in the number of private and commercial developers, and housing associations. Further to this, many like the NHS, prison services and schools are increasingly acquiring trust status, as a result of which they are now becoming self governing with very little central control. Their new developments are designed along private sector lines and emphasise speed, value - based services and cost - time - quality performance for a particular project. These clients possess construction management and control expertise, often employing in-house professionals and have a clear understanding of their contribution to the construction process.

One clear evidence in the current trends in construction environment is that of instability. Those changes which were evident in the 1980s have continued both more rapidly and extensively throughout the early 1990s. As a result of uncertainties being created by these trends, both construction firms and their institutions, and client organisations have shifted emphasis to expertise of people involved in construction process, building long-term relationships with improved quality of services. The objective of this review is to draw the attention of the reader to any gap that exists between the construction firms' knowledge of these changes with respect to clients needs and how the clients perceive the image of the industry as a whole.

6.7. 0. Procurements Systems

Traditionally, the method of project procurement in construction industry has been in form of competitive tendering in which the contractors have always depended on tender lists of contractors to be invited to tender for a project., The scenario of this competitive tendering is that:

- (i) the client and his advisors agree on the principal features of the project;
- (ii) the advisors draw up a specification for the various components;
- (iii) bills of quantity are issued by quantity surveyors;
- (iv) the specification is dispatched to the main contractor who are on an approved list;
- (v) Main contractors will decide on the role of sub-contractors and invite the latter to tender;
- (vi) Upon receipt of sub-contractors' bid, main contractors will draw up a consolidated bid and submit this to the client and/or his advisors;
- (vii) contracts are issued to the main contractor with the lowest bid, other things being equal.

The practice of competitive bidding, according to Hardy and Davies (1984), despite its popularity in the construction industry, competitive bidding has adverse implications for the

construction industry:

- (i) that it does not encourage technical innovation. In the construction industry, the client and/or his advisors draw up a specification and in some cases even go as far as suggesting brand name for material to be used. This leaves the contractor only price as a competitive tool.
- (ii) that it leads to fragmentation in the industry and thwarts the growth of efficient firms. The predominance of public sector and demand for openness and public accountability in the awarding of contracts, are the main reasons for the popularity of competitive bidding in the industry.

Even though this traditional procurement method still remains the most dominant system of construction procurement in the UK construction industry, there has been a significant shift to other forms of procurements systems over the past ten years (Akintoye, 1994; Langdon and Everest, 1994). It is no longer only the traditional form of tender, where a contractor prices specifications set by a consultant. There are now other procurement systems which are gaining wider acceptance throughout the construction industry such as:

- (i) design and build;
- (ii) management contract; and
- (iii) construction management

Akintoye (1994) observed even though traditional procurement methods continue to dominate, methods such as design and build, construction management, management contracting are increasingly popular. Design and build as a procurement route, Akintoye added, is seen to have arrived at the right time to address the clients concerns and bridges the gap between design and construction functions; and bring fresh structures into contract administration and delivery.

The report by Langdon and Everest (1994) also reveals, the most significant change has been in the use of design and build forms of procurement which has increased from 5% of total procurements in 1984 to 35.7% in 1993 (Figure 6.6), while the use of predominant traditional method has reduced from 72%in 1984 to 52% in 1993. Management contracting rose from 12% to 14% in 1989 and fell again to 6.2% in 1993. Construction management has also shown a rise from 6.9% in 1984 to 19.4% over the same period. This distinctive from consultant-led methods towards contractors-led method has been seen by many clients as a major step in clients achieving a single point of responsibility.

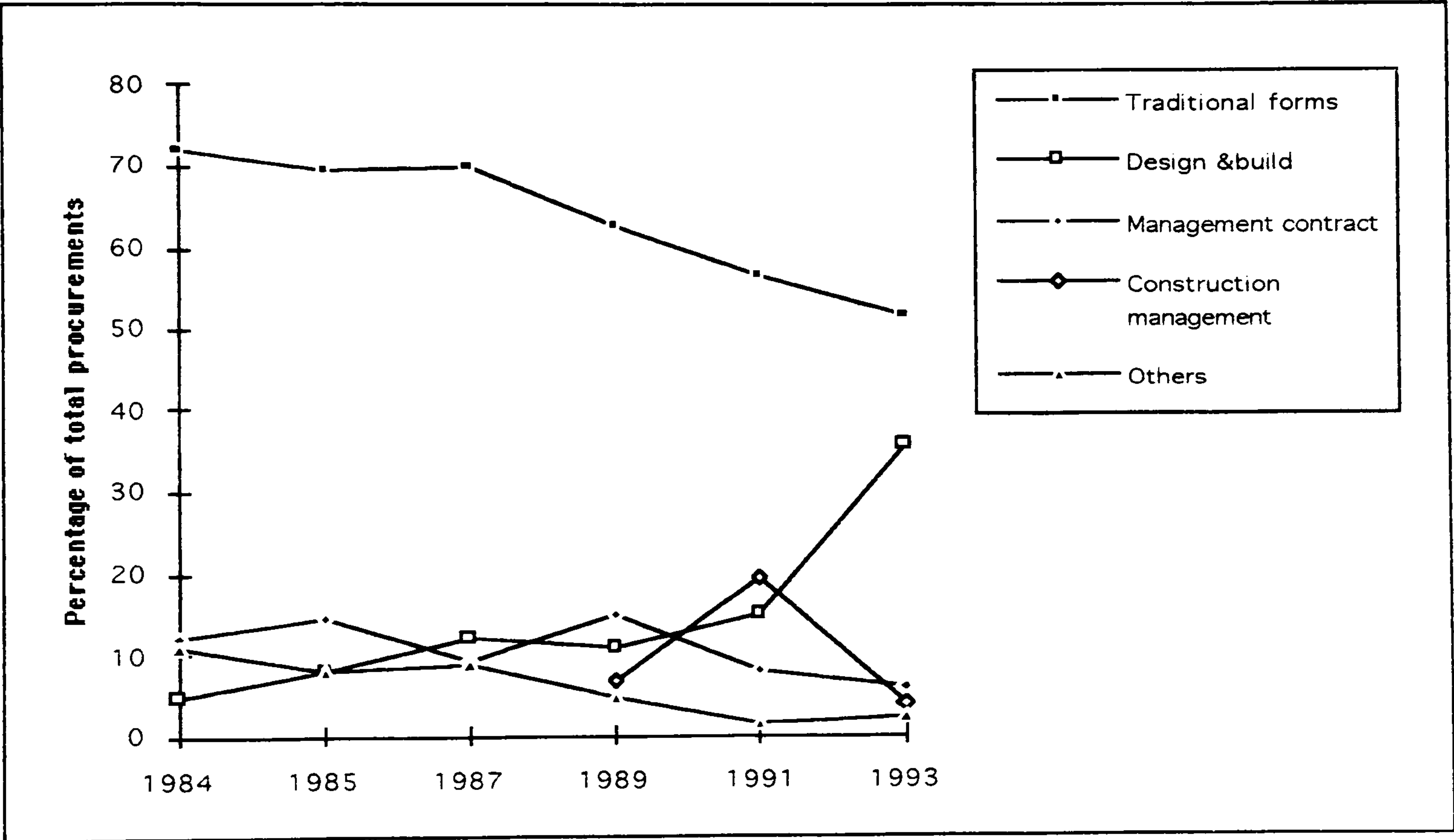


Figure 6. 6: Changes in the spread of procurement methods between 1984 and 1993.
Source: Royal institute of Chartered Surveyors, July 1994.

6.8.0. Formation of cross-boarder trading blocks

Britain’s overseas relations have been shaped by its past history as a major trading and maritime power (Huru, 1992). It has enjoyed a long standing trading and economic and

political cooperation notably with countries within the Commonwealth which include some of the richest and poorest members of the world community.. Britain became a member of the the European Community in 1973. The beginning of the 1990s has however witnessed some dramatic political economic and social changes capable of threatening the future of the UK construction industry.

For example, the emergence of EC single market in 1993, means a breakdown of trade barrier between the UK domestic market and the rest of western Europe as a result of which the UK economy has become a twelfth part of a larger economy (Barrett ,1993). The 1993 signing of the GATT agreement further removes entrants barriers into the UK construction market and some of the overseas markets where the UK firms had hitherto enjoy almost total monopoly. Elsewhere there are cross-boarder trading organisation such as Association of South East Asian Nations (ASEAN), North American Free Trade Agreements (NAFTA) and Economic Community of African States (ECA). The implication of the emergence of these cross boarder trading organisation is a threat to to the growth of the UK construction industry. First, the emergence of European single market means that the UK construction market which accounts for 85% of the output by UK construction industry is now opened to competitors from the rest of the community. Secondly, those region beyond where the UK contractors had hitherto enjoy easy access will now become very much competitive and difficult to penetrate due to tighter entry regulations. Thirdly, there are other threats from those developing nations because of cheap labour, proximity and language barriers. Probably, this explains the reasons for continuous falls in orders obtained by British firms in regions such as Latin America, Africa, and the Middle East (Housing and Construction Statistics, Dec. 1993).

6.9. 0. Competition

Traditionally, the competitive processes by which building projects were awarded were through competitive tendering and negotiated tenders. Within the UK construction industry, the predominant element of competition is price. But, Betts and Ofori (1992)

observed that competition in the construction industry has increased considerably in recent years due to influences resulting from changes in technology, changes in client desires as a result of variation in taste, aspirations; legislative changes, and purchasing power. The UK governments's competitive policy sector seeks to influence industrial performance indirectly by creating a framework within which firms pursue their interest in accordance with market forces. For the public sector which has always been classified as low quality, poorly managed and insensible to delivery, government policy was introduced to either sell off services or contract out those services provided by those public bodies

Further changes in competitive policy affecting competition in the construction industry includes the introduction of Compulsory Competitive tendering (CCT) for Local Authorities in March 1994 (Lathan, 1994). For construction related services under the CCT, the local authorities are required to market n test 35% of their architectural and engineering services by October 1995, rising to 65% by April 1996. This in effect means that professional units of local authorities are also free to compete for contracts against private firms. The arrangement also allows the management and staff in LA employment threatened by CCT to embark on management buy out in lieu of the direct service organisation. These developments mean increasing competition in a market that has seen continuous decline in the volume of demand for construction services in recent years.

6.10. 0: Developments in Technology

Another area of significant changes in the industry is in technological developments especially recent developments in Information Technology. There have been rapid advances in information technology in recent times which pose both threats and opportunities to the construction professions, arguing that on one hand, there is the danger that the professionals will become distilled as information technology makes expertise more widely available, possibly through expert systems. It is now possible to make phone calls, link up with computers any where, manipulating existing data, and make quick and accurate responses to clients requests (Barrett, 1993). Efficient market forecast, political and

economic predictions are now easily available through use of developments in information technology. Consequently information on new projects are easily accessible to a greater number of competitors than it was before. Projects information can now be obtained through the electronic media and print media, either in form of advertisement or as news item.

6.11.0 Construction Management Education

With the development of construction management education in the past two decades, business-type courses are now being taught to students of construction professions. Furthermore, degree courses in construction management are now being run in some Universities while postgraduate courses in construction management have been available since the 1970s. All these have led to increased awareness of vital management strategies for relating to business development.

6.12.0. Implication for Marketing

Changes in the construction industry (clients, structure, demand and supply, economic and political factors) exert pressure on an organisation to modify its strategies (goal and tactics) and its organisational structure Burns and Stalker (1961). Strategic growth results from an awareness of the opportunities and needs created by changing market environment. The marketing function must become central to the organisation and shape its future market strategy. A good understanding of the needs of the market arising from a greater attention to effective boundary regulation will lead to beneficial market segmentation and an inclination towards innovation, administratively as well as technically. Unfortunately, the UK construction industry is yet to score a pass mark in the planning and management of marketing function.

Studies have shown that marketing is yet to play a central role in many firms and the industry is still a milestone away from fulfilling these expectation (Morgan and Burnicle,

1991). The way forward is for construction firms to adequately assess their markets, both now and where they plan to be in the future. They must realise that marketing incorporates many business activities, both internal and external to the companies and embodies both a concept and procedure in its application.

The concept of marketing is that of focussing the activities of all departments of a company on the needs of the customer, and then organising the company's resources to identify and satisfy those needs profitably (Kotler, 1972). Marketing as a philosophy stems from recognition that a company can only survive by profitably providing goods or services that the customer wants to buy (Fisher, 1989). Again, too often the link between survival and success, and provision of what the customer wants, rather than what the company thinks the customer should want, is not made by construction industry bosses (Pearce, 1992).

In today's business environment, more than any preceding era, the only constant is change (David, 1991). To be successful, organisations must effectively manage change, continuously adapting their bureaucracies, strategies, systems, products, and cultures to survive the shocks and prosper from forces that decimate the competition. The need to adapt to these changes leads the organisations to key strategic-management questions, such as: what kind of business should we be? Are we in the right fields? Should we reshape our business? Who are we competing against? What strategies should we pursue? How are our clients changing?

6.13.0: Summary

There are many changes occurring in the UK construction industry: a levelling of the trade cycle; methods of placing contracts; increase emphasis on quality, experience and innovations; and increasing competition among firms. No organisation or individual can escape change, change is a fact of life in organisations. Hence construction firms must anticipate change and develop and offer training and development workshops so managers and employees can adapt to those changes. Changes and the needs to cope with them must

be communicated effectively.

Structural changes in the construction industry require that the firms diversify and at same time adopt a strategy for integrating design and construction process. This is with a view to developing joint venture projects and other relationship marketing strategies. With the downward trend in the domestic output, rising number of insolvencies, and slow pace of economic recovery in the UK, there is a need for UK construction firms as matter of urgent to develop aggressive and more adaptive marketing strategies to improve their overseas output.

Construction clients buying behaviours are changing. Scientific managerial techniques are now employed with emphasis being placed speed of delivery of services, value based services, and cost-time-quality performance and though contract price still remains predominant, the clients are becoming more and more less price sensitive. Marketing is a dynamic process and marketing techniques need to change as the buying mechanism evolves through various stages. Marketing orientation is concerned with such dynamics and consequently is of particular relevance to the future of firms in the industry. Failure to understand the most appropriate marketing techniques during different stages may reduce clients susceptibility to the marketing initiative, or possibly destroy the chances of their company winning over a particular client.

The need for market planning is therefore paramount for each firm in the 1990s. Bosses of construction firms must bear it in mind that clients will always look at products or services of functional quality, technical quality, and corporate image (total quality) and assess the companies by comparing the total quality of the company with its competitors. Developing marketing plans, strategies and innovatives will provide a considerable advantage over rivals and far more likely to win potential clients.

Procurement methods are rapidly shifting away from the traditional form of consultant-led to other forms such design and build, and management forms of procurements which are

contractor - led. This shift has enhance more clients participation in the construction process. For a long- term competitive advantage, marketing strategy must be developed towards relationship marketing by developing strategic alliances such as package deals, partnering arrangements, joint ventures, and offers of additional services to the client in addition to the construction services.

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Chapter VII

Procedures for Evaluation of Marketing Practices

Chapter Seven

Procedures for Evaluation of Marketing Practices

7.1. 0: Introduction

The literature survey of studies on construction marketing reported in Chapter 1 and 4 suggests that construction industry as a service industry lacks innovative marketing because there is:

- (i) a limited view of marketing;
- (ii) a lack of competition in the past; and
- (iii) a lack of creative management practice.

The aim of this research is to evaluate the management and practice of the marketing function within construction industry, with respect to the level of awareness and commitment to marketing; and level of integration with other management functions. In line with the objective described above, an exploratory study of marketing practices within construction industry in the UK was adopted. The methodology developed for this research in Chapter 2 set out to investigate corporate marketing objectives, and marketing programmes being employed to achieve these objectives. The pilot study, interview and literature reviews on the topic identified a number of marketing objectives of which thirteen were selected for further investigations in line with the aims and objectives of the research. Further to this, 16 activities were selected. This research seeks to combine elements of efficiency and effectiveness, corporate values, marketing orientation and efforts in assessing marketing practices within individual organisations.

After a thorough literature review, a questionnaire survey of construction firms as described in Chapter 2 was undertaken to investigate current marketing strategies and practices within the UK construction industry. This chapter discusses the results of the survey. The areas covered by the survey include:

- (i) management of the marketing function;

- (ii) current marketing practices;
- (iii) marketing orientation;
- (iv) corporate values; and
- (v0 achievements on marketing objectives.

7. 2. 0: Responses to the survey

The exploratory nature of this research requires that the response obtained reflects as much as possible the top managements’ perception on the research topic. Consequently the questionnaires were addressed to specific individuals in the responding organisations with specified responsibilities who are at the same time in position to provide authentic judgment on the questions asked. The responses were 50 (33.3%) of the 150 contractors, 40 (26.7%) of the 150 Architects and 52 (34.7%) of Engineers, which gives and overall response of 142 (31.56%). After a careful scrutiny of the responses (See Table 7.1) 35 questionnaires were selected from each of the three target groups, the remaining were not analysed because they were not properly completed.

Table 7.1 Result s of Survey Mailing

	Survey Sample	Number of Responses	Refusals (Written)	No Response To date	Percentage Response
Contractors	150	50	5	95	33.30
Architect	150	40	2	108	26.70
Engineers	150	52	4	94	34.70
Total	450	142	11	297	31.56

Table 7.2 shows that the categories of the respondents to this survey were well spread among top managements of the firms. For example, responses from architectural practices came from the Managing Directors or Partners. Responses from Engineers firms were mainly from Managing Directors/ Partners (80%) with the remaining 20% coming from other senior managers.

Table 7.2: Response categories

Categories	Percentage of Respondents		
	Contractor	Architect	Engineers
Managing Director/Partner,	22.7	88.6	80
Corporate Mkting Dir.	11.4	0	8
Marketing Executive	28.6	0	8
Marketing managers	25.7	0	4
Business Dev. manager	11.4	11.4	0

Table 7.3: Response categories by size of firm in annual turnover

Categories	Percentage of Respondents		
	Contractor	Architect	Engineers
£0m - £50m	43	100	88.6
£50 - £100m	3	0	5.7
£100m - £500m	2	0	5.7
£500m - £1000m	8.6	0	0
£1000m +	14.3	0	0

Table 7.4: Response categories by size of employees

Categories	Percentage of Respondents		
	Contractor	Architect	Engineers
0 - 50	8.6	95	77.1
50-100	8.6	5	8.6
100 -500	34.3	0	11.4
500 - 1000	14.3	0	2.9.
1000 +	34.3	0	0

7.3.0 The management of the marketing function

An important aspect of this research was to investigate how the marketing function is managed within individual firms. The first step in achieving this was to understand the degree or level to which marketing is seen as a priority by top management in each firm. The results presented on Table 7.5, shows that there is an above average consideration for marketing as a top management priority. Only 22.3% of the respondents consider marketing a low priority.

Table 7.5: Top management’s perceived level of priority on marketing plans

Type of Firm	Percentage of Respondents				
	Very low	Low	Average	High	Very High
Contractor	0.0	2.9	34.3	40.0	22.9
Architects	25.0	5.0	50.0	10.0	10.0
Consulting Engineers	17.1	17.1	25.7	28.6	11.4
Overall Average	14.0	8.3	37.0	26.2	15.8

Secondly, the research sought to understand current marketing organisation through structure, line of authority and responsibility. Table 7.6 gives a picture of how marketing is organised and managed within the respondent firms. The results show four types of arrangements. On the average, 66% indicated that marketing is managed by a Partner/Director/senior manager in addition to other responsibilities, 18.1% have a structured marketing department headed by an employed marketing executive, 9.5% have a structured marketing department headed by a marketing executive who is a director/member of the Board and the remaining 6.4% have other arrangements or a combination of the above arrangements. A breakdown of this shows that 95% and 80% of Architectural and Engineering firms respectively employ the first arrangement in contrast to contractors with only 22.9% with this arrangement. 45.7% have their marketing function organised and managed by an employed marketing executive, while 22.9% favoured the third arrangements compared with the 5.7% and 9.5% from Architects and Engineers respectively.

Table 7.6: Organisation and management of marketing function

Organisation & management	Percentage of Respondents			
	Contractor	Architect	Engineers	Average
1.Marketing is managed by a Partner/ Director/ senior manager in addition to other responsibilities	22.9	95.0	80.0	66.0
OR				
2. We have a structured marketing department headed by an employed marketing executive.	45.7	0.0	8.6	18.1
OR				
3. We have a structured marketing department headed by a marketing executive who is a director/member of the Board	22.9	0.0	5.7	9.5
OR				
4. Other arrangements or a combination of the above arrangements	8.6	5.0	5.7	6.4

7.3.1.Marketing Planning

Marketing and strategic planning cannot be completely separated as the mission for marketing is to implement strategic plans, whether explicit or not. Hence, for every organisation there should be a natural hierarchy of business activities which move from an external focus through to internal action and control .One question in the survey sought to address the issue of extent of formal marketing planning and practices among the three categories of firms surveyed.

Table 7. 7: Formal and Non-formal Marketing Planners

Category of Firm	Percentage of Respondents	
	Planners	Non-Planners
Contractor	62.8	37.2
Architects	10.0	90.0
Consulting Engineers	28.6	71.4
Overall Average	33.8	66.2

Table 7.7 reveals that only 33.8% of all the three categories have ‘formal marketing plans’ 66.2% do not have formal marketing plans. Planning and strategy are closely related in the process of making marketing concept operational. A second question asked in respect of marketing planning was to find out at what level of management the responsibility for marketing programmes lay.

Table 7. 8: Responsibility for marketing Plans

Respondent Status	Percentage of Respondents			
	Contractor	Architect	Engineers	% Average
Board of Directors/partner	37.1	88.6	68.3	64.7
Corporate Marketing Director;	14.3	0.0	2.9	2.7
A Marketing Executive;	17.1	0.0	17.2	11.4
Regional Marketing Managers;	8.6	0.0	0.0	2.9
Business Dev Manager	11.4	11.4	11.5	11.4

The results on Table 7.8 indicate that that responsibility for marketing programmes to a greater extent rests on the partners in addition to other responsibilities. As can be seen, from 80% of Architectural firms and 45.7% of Engineering firms, this responsibility rests on a partner. Although the function appears to be more departmentalised and delegated

within contracting firms, with the responsibility resting on 37.1% of Board Members, 14.3% on corporate marketing directors, 17.1% on marketing executives and 11.4% with business development managers.

Another important aspect of marketing plan, is the time ingredient, which provides the marketing participant with a schedule for reaching various levels of accomplishment. In essence, the time factor encourages the manager - whether in advertising, sales, or some other marketing activity- to accomplish specific objectives within a formal, designated period. Hence a question was asked on individual time frame for marketing programmes (irrespective of whether they are formal or informal programmes).

From Table 7.9 below it can be seen that four out of five of the respondents have less than two years planning period. 57% actually do not plan beyond one year period. 11.2% do not have any marketing plan . A breakdown of this result shows that the contractors fare better than the professional practice firms, with about 46% planning beyond two years: 25.7% plan for a period of two to three years, 14.3% for 3-5 yrs and 6% planning for more than 5 yrs. No Architectural firm plans beyond two years. Only 5% of Engineering firms plan beyond 2 years.

Table 7.9. Characteristic Time Frame for Marketing Plans

Type of Firm	Time range for marketing Programmes						
	Percentage of Respondents						
Type of Firm	0 yr.	0-1 Yr.	1-2 yrs	2-3 yrs	3-5 yrs	5+yrs	
Contractors		2.9	14.3	37.2	25.7	14.3	5.7
Architects		5.0	75.0	20.0	0.0	0.0	0.0
Engineers		25.7	48.8	22.9	2.9	0.0	2.9
Overall Average		11.2	46	26.4	9.5	4.8	2.9

7.3.2.Control of marketing programmes

The third aspect of marketing management outlook surveyed was the monitoring of marketing programmes in an attempt to find out whether or not there is any attempt by these firms to evaluate marketing activities. Table 7.10 reveals that up to 63.3% of the respondents do not monitor their marketing programmes.

Table 7.10: Monitoring of marketing programmes

Firms	Percentage of Respondent	
	YES	NO
Contractor	65.7	34.3
Architects	10	90%
Consulting Engineers	34.3	65.7
Mean	36.7	63.3

7.3.3. Marketing Resources within Construction Firms

Marketing budget within many construction firms in the past consists of wages, sales expenses, product literature, and limited public relations activities (Davis,1981). But more recently we have seen both professionals and practitioners engaged in other marketing activities which include: professional activities designed to influence the market place; market research; corporate identity programmes and other marketing aids such as use of information services (Arditi and Davis, 1988). To address this issue, one section of the questionnaire was designed to investigate resources available for these practices, in terms of manpower, skills and budgets. One of the questions on resources was framed to find out whether a firm has employees with responsibilities to organise, plan and manage the marketing function within and outside the organisation. Table 7.11 gives an indication that virtually all the responding firms have people with marketing responsibilities.

Table 7.11: Response categories by size of marketing employee

Number of Categories	Percentage of Respondents		
	Contractor	Architect	Engineers
1 - 10	65.7	100.0	85.7
10- 50	22.9	0.0	8.6
50 -100	5.7	0.0	5.7
100 - 500	5.7	0.0	0.0
500 +	0.0	0.0	0.0

Regarding skills, the responses to the question on whether firms employ marketing professionals are shown on Table 7.12. By marketing professionals, we mean individuals who have professional qualifications in marketing. The findings show that 31.4% contractors did not have marketing professionals in their employment. This figure is almost tripled by firms of Architects and Engineers with 75% and 85.7% respectively. In addition to this was a question on whether or not a firm makes use of external marketing agents or services.

Table 7.12: Firms Employing marketing professional

Type of Firm	Percentage of Respondents	
	YES	NO
Contractor	68.6	31.4
Architects	25.0	75.0
Consulting Engineers	14.3	85.7
Overall	35.96	64.04

Table 7.13: Use of external marketing agents

	Percentage of Respondents				
	Never	Occasionally	Regularly	Very often	Always
Contractor	48.6	42.8	8.6	0.0	0.0
Architects	80	20.0	0.0	0.0	0.0
Consulting Engineers	62.8	37.2	0.0	0.0	0.0

Table 7.13 reveals about 49% of contractors do not engage the services of external marketing agents. From the Architectural practices and the Engineers we have 80% and 63% respectively. Only 8.6% of contractors make regular use of external marketing agents and 43% do occasionally employ the services of these agents. The survey further reveals that non of the professional practices make regular use of external marketing agents. However, 20% of Architectural firms and 37% of Engineering do occasionally employ the services of external agents.

Table 7.14: Average Annual Expenditure on Marketing

Type of Firm	Marketing Expenditure as a % of Annual Turnover				
	Percentage of Respondents				
	0%-2%	3%-5%	5%-7%	7%-10%	10%+
Contractor	74.3	17.1	8.6	0.0	0.0
Architects	80.0	15.0	5.0	0.0	0.0
Consulting Engineers	48.6	37.2	14.3	0.0	0.0
Overall Average	67.6	23.1	9.3	0.0	0.0

One other important aspect of resources addressed in the research was annual expenditures on marketing as a percentage of annual turnover. As shown on Table 7.14 , all categories of firms surveyed seem to have a common trend. Firstly, none of the firms surveyed spends

more than 7% of its annual turnover as marketing expenditure. 74.3% of contractors spend between 0% to 2%, with 17.1% of them spending 3%-5% and the remaining 8.6% spending 5%-7%. The same trend is observed from the professional firms, with 80% of architectural practices spending less than 2% of their annual turnover as marketing expenditure. On the overall average, 67.6% of all the three categories spend less than 2% of their annual turnover on marketing. This is probably because a greater percentage of construction contracts are still through traditional methods and contractors still rely on recommendation by the professional firms while professional firms spend greater time at making contacts with new clients and existing ones for new jobs. Another important point of note is that profit margins in these categories of firms are low.

7.4.0 Current marketing practices

It was observed in chapter 5 that organisations in the construction industry have adopted marketing for a number of reasons, including variations in workload, an unfavourable supply and demand position and changing markets within the industry. However, it was noted that there were many deeply held misconceptions about the appropriateness and value of general management skills and marketing skills in particular. One of the aims of this research is to evaluate the management and practice of the marketing function within construction enterprises and in particular, to identify a wide range of marketing activities as currently carried out by firms and to determine the most critical and most effective of such programmes with a view to establish distinctive features and to identify factors which affect the effectiveness of these marketing activities.

7.4.1. Marketing effort

As a way of evaluating marketing practices in the construction industry, the research was designed to examine the commitment of firms to the execution of their marketing programmes, particularly as it relates to effort. Effort in itself can be looked at in many facets: quality of marketing structures, level of marketing skills, resources, top management support and motivation available to implement the marketing programmes. Bearing this in mind, a section of the questionnaire was designed to determine individual firm's assessment in terms of its commitment to marketing in terms of efforts expended on

these activities (See Chapter 2). For example, the firms were asked to indicate on a 10-point scale their perceived amount of efforts expended on these marketing activities as follows:

Question: Please indicate how much effort is expended on each of the following marketing activities in your organisation.

Answer: On a 10-point scale, where, 0 = no effort and 10 = maximum expected effort.

These scores were transformed into relative importance weightings (See Cohen, 1988; Wilson et al, 1992). These weightings were calculated from the expression:

Relative importance weighting (w_i) of an activity i =
$$\frac{\sum T_{ij}}{M * K * N} \dots\dots\dots(1)$$

- Where:
- T_{ij} = Rated score given to effort on marketing activity i by the respondent j and ranges from 0 to 10 where 0 = no effort and 10 = maximum expected effort.
 - M = highest score (i.e., 10 in this case)
 - N = total number of respondents
 - K = number of activities (16)

The value of relative important weighting ranges from 0 to 1. For example the value of w for effort on ‘Pre-project proposals’ from contractors sample on Table 7.15 is 0.70. To demonstrate how this is calculated, the sum of scores on ‘personal selling’ from all 35 respondents in contractors group is 244.

Hence: $w_i = 244/10*35 = 0.70$

To compare the overall relative importance weighting for all the three categories, the mean of all the weighting for each activity.

Overall group index (W) =
$$\frac{\sum w_i}{n} \dots\dots\dots(2)$$

Where, w_i = Relative importance weighting of activity_i

n = Number of activities (16)

Efforts by Contractors

From Table 7.15 we can see that only six out of sixteen activities listed scored 0.5 or more on the weighting scale. This relative important weighting has been produced mainly to compare the activities among themselves and as a mean of ranking these activities in terms of efforts expended on them by the respondents. The six activities scoring 0.5 or more on the weighting score are as follows in their rank order: “pre-project proposals”, “personal selling”, “offers of additional services”, “offers of alternative to project proposals”, “use of information services” and “corporate identity programmes”. On the whole, the contractors scored 0.44 on the weighting scale just below the midpoint of the scale. This represent moderate amount of effort by the contractors.

Table 7.15. Contractors’ marketing efforts

Marketing Activities	Rated Scores on Marketing Effort			Total Score	Relative Importance Weightings	Ranking of Activity
	≤3	4-6	7≤			
Pre-project proposals	6	2	27	244	0.70	1
Personal selling	8	11	15	197	0.57	2
Additional services offered	9	11	15	196	0.56	3
Alternative proposals	11	7	17	188	0.54	4
Information services	12	9	14	180	0.52	5
Corp. Identity programmes	12	10	13	177	0.51	6
Market Research;	14	8	13	166	0.47	7
Joint ventures	13	9	13	164	0.46	8
Public relations	15	13	7	137	0.39	9
Exhibitions/promotional videos	20	9	6	115	0.33	10
Sponsorships of events;	20	9	6	110	0.32	11
Acquisition/Mergers	18	12	5	108	0.31	12
Advertising;	23	9	3	105	0.30	13
Conferences	20	10	5	104	0.29	14
Charitable donations	20	13	2	99	0.28	15
Discount offers	26	7	2	71	0.20	16

Table 7.16. Engineers’ marketing efforts

Marketing Activities	Rated Scores on Marketing Effort			Total Score	Relative Importance Weightings	Ranking of Activity
	≤3	4-6	7≤			
Pre-project proposals	19	14	2	116	0.33	1
Personal selling	25	7	3	112	0.32	2
Additional services offered	29	6	0	80	0.24	3
Information services	29	6	0	80	0.24*	4
Public relations	27	8	0	79	0.23	5
Alternative proposals	29	5	1	74	0.21	6
Joint ventures	31	5	0	73	0.21*	7
Corp. Identity programmes	30	5	0	71	0.20	8
Advertising;	31	3	1	67	0.19	9
Market Research;	32	3	0	67	0.19*	10
Attendance at conferences	30	5	0	63	0.18	11
Exhibitions/films shows	33	2	0	57	0.17	12
Sponsorships of events;	33	2	0	55	0.16	13
Discount offers	31	4	0	53	0.15	14
Acquisition/Mergers	34	1	0	46	0.13	15
Charitable donations	33	2	0	41	0.12	16

* equal relative importance indices; ranked in accordance with number of respondent score 7≤

Table 7.17: Architects marketing efforts

Marketing Activities	Rated Scores on Marketing Effort			Total Score	Relative Importance Weightings	Ranking of Activity
	≤3	4-6	7≤			
Personal selling	20	14	1	117	0.33	1
Pre-project proposals	21	13	1	100	0.29	2
Alternative proposals	24	8	3	91	0.26	3
Additional services offered	23	11	1	85	0.24	4
Public relations	27	7	1	75	0.22	5
Information services	28	6	1	73	0.21	6
Corp. Identity programmes	29	5	1	70	0.20	7
Advertising;	33	2	0	69	0.19	8
Market Research;	29	6	0	66	0.18	9
Exhibitions/films shows	31	4	0	61	0.17	10
Sponsorships of events;	33	2	0	55	0.16	11
Conferences	33	2	0	52	0.15	12
Joint ventures	34	1	0	52	0.15*	13
Discount offers	31	4	0	45	0.13	14
Acquisition/Mergers	35	0	0	37	0.11	15
Charitable donations	35	0	0	34	0.10	16

* equal relative importance indices; ranked in accordance with number of respondent score 7≤

Table 7.18. Overall ranking of effort on marketing programmes

Marketing Programmes	Relative Importance Weighting				Overall Ranks
	Contractors	Engineers	Architects		
Pre-project proposals	0.70	0.32	0.33	0.44	1
Personal selling	0.57	0.32	0.29	0.41	2
Additional services offered	0.56	0.24	0.24	0.35	3
Alternative proposals	0.54	0.21	0.26	0.34	4
Information services	0.52	0.24	0.21	0.32	5
Corp. Identity programmes	0.51	0.20	0.20	0.30	6
Public relations	0.39	0.23	0.22	0.29	7
Market Research	0.47	0.19	0.18	0.28	8
Joint ventures	0.46	0.21	0.15	0.27	9
Advertising;	0.30	0.19	0.19	0.23	10
Exhibitions/films shows	0.33	0.17	0.17	0.22	11
Sponsorships of events;	0.32	0.16	0.16	0.21	12
Conferences	0.29	0.18	0.15	0.20	13
Acquisition/Mergers	0.31	0.13	0.11	0.18	14
Discount offers	0.28	0.12	0.10	0.17	15
Charitable donations	0.20	0.15	0.13	0.16	16

Effort by engineers

From the results on Table 7.16 no activity scored up to 0.50 on the relative important weighting scale. In fact the highest score was 0.33 for “pre-project proposals” which is followed closely by “personal selling” with a score of 0.32. Each of the last eight of the activities in order of their ranks as shown on Table 4 scored less that 0.20 on the weighting scale. The overall relative important weight on marketing effort by the engineers was 0.19 on the weighting scale. This represents very serious lack of commitment to marketing.

Effort by architects

The results for the architects are presented on Table 7.17. The highest score for the architects is 0.33 on “personal selling”, followed by “pre-project proposals” (with 0.29) and “alternative proposals” scoring 0.26. As with the results of the engineers, nine of of the sixteen activities scored less that 0.20 on the weighting scale. The overall relative important weighting for effort of architects on marketing activities is 0.16 which is far

below expectation. Again this reflect lack of commitment to marketing on the part of the architects as it is with the engineers.

Table 7.18 gives the overall summary of effort on marketing activities by all the three categories of respondents. The overall ranking of effort each activity by all the three groups of respondents is calculated from the average of the relative important weighting obtained for each group. On the overall effort on marketing activities, the activity with the highest score is "pre-project proposals" with a score of 0.44 on the relative important weighting scale, followed by "personal selling" (0.41), "offer of additional services" (0.35), "alternative proposals" (0.34), "information services" (0.32) and "corporate identity programmes" (0.30). These results have re-echoed our previous argument that marketing is not well developed in the construction industry. Even though the responsibility for marketing programmes lie with top management of firms as indicated on Table 7.6, not much effort as the results revealed is being expended on these programmes.

7.4.2. Effectiveness of marketing activities

In general terms, strategic planning orientation leads to the development of measures for marketing effectiveness. In most companies the marketing function is evaluated on the basis of market share and income (Mehrotra, 1984), and careers of marketing managers hinge on their ability to produce the 'magic number'. Given these reward structures it is easy to see why the focus of those charged with the task of implementing the marketing function has shifted away from the true purpose of marketing - identifying and meeting the needs and wants of the end users (Client) to meeting the short term 'number' oriented goals. Effectiveness encompasses the attainment of the organisation's objectives and relates output to the ends or objectives of the organisation. Measure of effectiveness therefore refer to how appropriate and relevant these can be perceived in terms of meeting the needs and objectives of the corporations. As part of our investigation on marketing programmes the respondents were asked to indicate on a 10-point scale how effective these activities have been to their marketing objectives. A similar analysis using relative importance weighting (Section 7.3.0) was performed on the responses on effectiveness of the activities.

Table 7.19. Effectiveness of contractors’ marketing programmes

Marketing activities	Rated Scores on Marketing effectiveness				Total Weighting	Relative Importance of Activities	Ranking of
	≤3	4-6	7≤	Score			
Pre-project proposals	6	2	27	244	0.70		1
Personal selling	8	11	16	197	0.57		2
Additional services offered	9	11	15	196	0.56		3
Alternative proposals	11	7	17	188	0.54		4
Information services	12	9	14	180	0.52		5
Corp. Identity programmes	12	10	13	177	0.51		6
Market Research;	14	8	13	166	0.47		7
Joint ventures	13	9	13	164	0.46		8
Public relations	15	12	7	137	0.39		9
Exhibitions/films shows	20	9	6	115	0.33		10
Sponsorships of events;	20	10	5	110	0.31		11
Acquisition/Mergers	18	12	5	109	0.31*		12
Conferences	20	10	5	104	0.30		13
Advertising;	23	9	3	104	0.30		14
Charitable donations	20	13	2	99	0.28		15
Discount offers	26	7	2	71	0.20		16

* equal relative importance indices; ranked in accordance with number of respondent score 7≤

Table 7.20. Effectiveness of engineers’ marketing programmes

Marketing Activities	Rated Scores on Marketing effectiveness				Total Weighting	Relative Importance of Activities	Ranking of
	≤3	4-6	7≤	Score			
Pre-project proposals	19	14	2	116	0.33		1
Personal selling	25	7	3	112	0.32		2
Additional services offered	29	5	1	80	0.24		3
Information services	29	6	0	80	0.24*		4
Public relations	27	8	0	79	0.23		5
Alternative proposals	29	5	1	74	0.22		6
Joint ventures	30	5	0	73	0.21		7
Corp. Identity programmes	30	5	0	71	0.20		8
Advertising;	31	3	1	67	0.19		9
Market Research;	32	3	0	67	0.19*		10
Conferences	30	5	0	63	0.18		11
Exhibitions/films shows	33	2	0	57	0.16		12
Sponsorships of events;	33	2	0	55	0.15		13
Discount offers	31	4	0	53	0.14		14
Acquisition/Mergers	34	1	0	46	0.13		15
Charitable donations	33	2	0	41	0.12		16

Table 7.21. Effectiveness of architects’ marketing programmes

Marketing Activities	Rated Scores on Marketing effectiveness				Relative Importance Weighting	Ranking of Activities
	≤3	4-6	7≤	Total Score		
Personal selling	20	13	2	113	0.32	1
Alternative proposals	24	7	4	97	0.28	2
Pre-project proposals	21	12	1	96	0.27	3
Additional services offered	23	10	2	81	0.23	4
Public relations	27	6	2	71	0.20	5
Information services	28	6	1	70	0.20*	6
Corp. Identity programmes	29	5	1	67	0.19	7
Advertising;	33	2	0	66	0.19*	8
Market Research;	29	6	0	61	0.17	9
Exhibitions/films shows	32	3	0	56	0.16	10
Joint ventures	34	1	0	52	0.15	11
Sponsorships of events;	34	1	0	50	0.14	12
Discount offers	31	4	0	45	0.13	13
Conferences	33	2	0	36	0.10	14
Acquisition/Mergers	35	0	0	36	0.10*	15
Charitable donations	34	1	0	34	0.09	16

Table 7.22. Overall ranking of effectiveness of marketing programmes

Marketing Programmes	Relative Importance Weighting				Overall Ranks
	Contractors	Engineers	Architects		
Pre-project proposals	0.70	0.33	0.27	0.43	1
Personal selling	0.57	0.32	0.32	0.40	2
Alternative proposals	0.54	0.22	0.28	0.35	3
Additional services offered	0.56	0.24	0.23	0.34	4
Information services	0.52	0.24	0.20	0.32	5
Corp. Identity programmes	0.51	0.20	0.19	0.30	6
Market research	0.47	0.19	0.17	0.28	7
Joint ventures	0.46	0.21	0.15	0.27	8
Public relations	0.39	0.23	0.20	0.26	9
Advertising;	0.30	0.19	0.19	0.23	10
Exhibitions/films shows	0.33	0.12	0.16	0.21	11
Sponsorships of events;	0.31	0.15	0.14	0.20	12
Conferences	0.30	0.18	0.10	0.19	13
Acquisition/Mergers	0.31	0.13	0.10	0.18	14
Charitable donations	0.28	0.12	0.09	0.16	15
Discount offers	0.20	0.14	0.13	0.15	16

Effectiveness of contractors marketing programmes

The results on Table 7.19 show only six out of the sixteen activities scored over 0.50 on relative important weighting scale for effectiveness. These activities include; “pre-project proposals” (0.70); “personal selling” (0.57); “offer of additional services” (0.56); “alternative proposals” (0.54); “use of information services” (0.52) and “corporate identity programmes” (0.51). The least effective of the activities from the results is “discount offers” with weighting of 0.20. Overall effectiveness weighting for the contractors group is 0.42.

Engineers

The responses on effectiveness of engineers marketing programmes are presented on Table 7. 20. The most effective activities from the engineers assessment is “pre-project proposals” with important weighting of 0.33. This is closely followed by “personal selling” (0.32). “Offers of additional services” and “information services” both score 0.24 on weighting scale and closely followed by “public relations”. The least effective activity from the engineers responses is “charitable donation” with a score of 0.12 on weighting scale. The overall weighting score for the engineers is 0.20. This indicates poor performance in relation to effectiveness of marketing practices.

Architects

From Table 7.21 the most effective activity from the architects point of view is “personal selling” with weighting of 0.32. This is followed by “offer of alternative proposals”, “pre-project proposals” and “additional services” scoring 0.28, 0.27, 0.23 respectively. The overall relative weighting of effectiveness of architects marketing activities is 0.17 on the relative importance weighting scale. The overall weighting of effectiveness of marketing programmes is 0.26. Table 10 show significant differences in the level of perceived effectiveness for the three groups of respondents. On the whole the perceived level of effectiveness of these activities does not appear to be satisfactory. The highest score among the activities is 0.43 for “pre-project proposals” on the weighting scale. Since it was also part of the objective of this research to determine the most effective of these activities, using the relative important weighting , each activity was ranked in accordance with relative weighting on its overall effectiveness.

Pre-project proposals

Taking the relative weightings as an aggregate measure of effectiveness of the marketing activities identified, “pre-project proposal” ranked highest amongst these activities with an overall weighting of 0.43 (Table 7.22). This activity received the highest scores of 0.70 and 0.33 from the contractors and the engineers respectively and came a close second from the architects’ category. During the 1980s, new forms of marketing practices started to become prominent features in the marketing of construction services. In industrial markets, buyer-seller relationships have typically involved relatively long-term contractual commitments, but even here the relationship is often at arm’s length and adversarial, pitching the customer against the vendor in battle for low cost (Webster, 1992).

In the cases where this long-term relationship has been established, contractors and professionals alike do monitor the progress of clients and present proposals for expansions. Because of ever increasing competition in the industry, “pre-project proposals” have become increasingly prominent marketing practices between firms and those clients with which a long time relationship has been established. Where it has been successfully employed, it has been advantageous at presentation during prequalifying interviews and contract documentation. Pre-project proposals also provides an opportunity for construction firms to promote new innovation and creative ability. One respondent gave an instant of his company, through this activity, being instrumental to development and expansion of one particular supermarket chain of stores by conducting market survey and feasibility studies towards such an expansion.

Personal Selling

Amongst the activities listed, personal selling ranked second in terms of effectiveness as perceived by the respondents with an overall weighting of 0.40. Personal selling is considered one of the most effective promotional tools in the construction industry. Relationships developed between contractor and clients, potential clients or consultant are considered a key factor to success in construction business. It is a channel for providing or reinforcing precise information or solutions to specific market needs. Personal selling involves personal contact with potential clients but it is also done by personal letters and telephone in most cases as a valuable route to securing first meeting with potential clients.

Personal selling was considered the most effective marketing channel by smaller firms and especially by the small design firms.

Alternative Proposals

Alternative proposals to projects or schemes ranked third on the weighting scale. It scored 0.35 on relative weighting index of effectiveness of marketing activities. This is a new marketing strategy that has gained prominence in construction in recent times. Due to the increasing sophistication in the buying behaviour of construction clients, construction firms have become more and more aware that quality does not just sell but also costs less (Fellows and Langford, 1993). The idea of offering alternatives to clients proposals is to provide the client with a high quality functional service to meet the same objective as the original proposals at a very much lower cost. One argument against this especially among the public clients, is that it does not allow for fairness of competition. Secondly, the client might be tempted to go for cheaper alternative without properly considering the functional implications (Arditi and Davis, 1988). A number of respondents also commented that this activity is welcome by private clients because it provide an opportunity for the clients, contractors and the consultants to be all together involved in the project from the design stage to completion, creating a scenario for integrating design and construction processes.

Offer of Additional Services

This activity ranked fourth with an overall weighting of 0.34 .The use of additional services as marketing tool comes in the form of design services, feasibility studies, assistance in getting permit and licences and in some cases helping the client in compensation arrangements. Offer of additional services as with three activities above is an instrument for building mutual business relationship with the clients. Many commercial trading relationships are dynamic and durable, self-adjusting to changes in business environments. According to Anderson and Weitz (1991), committed relationships are based on confidence that the affiliation will last, a desire to make it last, and a willingness to make sacrifices to develop the relationship.

Information Services

The use of information serves as marketing tool ranked fifth with weighting score of 0.32.

Marketing staff in construction firms spend a large proportion of their time on fact gathering. For marketing planning to be effective, marketing planners need good access to information obtained from a carefully designed information system. Information systems in construction involve gathering information on clients, competitors, government policies and the firms position relative to other competitors (Arditi and Davis, 1988; Fisher, 1989). Information services have become a strong marketing tool as information technology makes expertise more widely available, possibly through expert systems and consequently, the same technology holds out the possibility for firms to greatly enhance the quality of the services they have to offer (Barrett, 1993). It is now possible to make phone calls, link up with computers any where, manipulating existing data, and make quick and accurate responses to clients request.

Corporate Identity programmes

Corporate identity programme as marketing activity ranked sixth. The primary objective of corporate identity programmes is to develop a corporate reputation visibility which communicates the company's intent, its beliefs and the main direction of the business. According to Friedman (1984), it signifies a single, unified and solid corporation, modern management, up to date technology with purpose and direction. Construction firms promote their corporate identities through logos on letter headed papers, envelopes, vehicles and plants, T-shirts and fencings on projects sites.

Market Research.

This important Marketing activity ranked seventh on the weighting scale of effectiveness of marketing activities with an overall index of 0.28. The main objective of market research is to help reduce uncertainty in decision making. For marketing planning to be effective there is a need for current and accurate market information not only at finding new jobs but also to research into prospective clients' past history of litigations, delays in payment, suspension of works and their existing relationships with other competitors. Some respondents said that most of information that should be obtained through market research are now available through various channels of information services and as such the burden of conducting research has greatly reduced. While this may be true to some certain degree, in an industry in which a large proportion of management time is spent on searching for

new job opportunity, the importance of market research cannot be overemphasised.

Joint Ventures

This activity ranked eighth with an overall weighting of 0.27 (Table 7.10). Joint Ventures, as the term is used here, are one kind of strategic alliance. It is gaining increasing popularity especially for large construction projects like motorways and even large industrial infrastructures. A joint venture, according to Young (1992), is a strategy available to an organisation which can be used to undertake a project that could otherwise be beyond a single company's financial or production capabilities. It is considered as a means of diversification. It allows companies to improve communications, acquire capital and technology, to develop new products and penetrate new markets, to globalise operations and to minimise risk and enable cooperating firms to compete favourably with larger firms (David, 1991).

Public relation/publicity

Public relation (PR) is also an important aspect of marketing practices in the construction industry today. It ranked as the ninth most effective activity with an overall weighting of 0.26. The primary objective of public relations (PR) is to develop business contact with potential clients. The construction firms still find these activities useful. The firms use print media such as professional magazines/journals to publish new innovations, such as construction techniques, design procedures and to publicise new contracts all as part of their promotional exercises.

Advertising

From the overall weighting of effectiveness of marketing activities advertising was ranked tenth with a weighting of 0.23. Advertising is necessary to convey a message about the company to existing and potential clients. Unlike the consumer marketing that places great importance on advertising as regularly seen in newspapers, magazines and television, the construction industry spends very small amount of its budget on advertising. These advertisements are normally found in trade magazines or direct mail sent to companies. They are not directed at the general public, but to a specific audience, hence the choice channel of advertising is influenced by the size and type of target audience. There are many

avenues available for construction firms to advertise their firms and the kind of services they offer.

Exhibitions/promotional videos

Effectiveness of exhibition/promotional videos as marketing activities was ranked eleventh with an overall weighting of 0.21. Many exhibitions concerned with construction industry are held annually in the UK, whereby many organisations concerned with construction activities are represented. Many firms obtain stands at such exhibitions for purpose of displaying their activities such as photographs of projects completed and those still in progress. Brochures and other literatures can also be distributed at such occasions while some firms go as far as showing promotional videos.

Sponsorship of events and charitable donations

Construction firms are some times invited to sponsor some events such as raising funds for charity and donating some prizes at some sporting events. Sponsorship is a form of advertising and it is a good way of promoting an organisation's name. Few larger construction firms make use of this avenue for promotional purposes. Apart from sponsorships of events, there are other opportunities for construction organisation just like any other business organisation to obtain debentures entitling them to reserve seat at sporting events for the purposes of entertaining friends or clients. Though this aspect of promotions is not expected to unduly influence such friends or clients in their workday life, it helps to strengthen friendship between the marketers and the clients or friends. These two activities are closely related and ranked twelfth and fifteenth with overall weightings of 0.20 and 0.16 respectively.

Conferences

Conferences are good avenues for promoting individual firms and their activities through interaction with potential clients such as professionals in the civil service or advisors to potential private clients. Professional conferences are held annually and, some cases quarterly. Construction firms can always promote themselves through literature distribution and seminar presentation at the conference. The effectiveness of this practice as a marketing tool ranked thirteenth with overall weighting of 0.19.

Others

As a result of increasing competition in the industry many firms in a bid to avoid being squeezed out of business have resulted to mergers with either stronger or more viable ones to enhance their competitive ability. Mergers also take place in case where a firm lacks the full capability for a particular project it wants to bid for. The other reason given by the respondents for adopting this strategy, especially among the multinational company was that it enables market penetration and enhance competitiveness in those segments of construction market where there are barriers such as language, cultural differences, and differences in contractual arrangements. Effectiveness of mergers and acquisitions ranked fourteenth with overall weighting of 0.18. The last activity in the order of ranks of effectiveness of marketing activities from our survey is Discount offers with overall weighting of 0.15. Flanagan and Norman (1989) were of the view that an increasing proportion of construction contracts is awarded through negotiation and added that the process of negotiation warrants attention as a determinant of the final contract price. Offer of discount on contract sums have been used successfully as marketing tool especially by the professional firms. Some commented that they often offer discounted services especially in times when clients with whom they have long standing business relations are in financial difficulty with a view to obtain a more profitable contracts in future.

7.5.0. Marketing Orientation

To further address the issue of corporate value, one issue that this research sought to address was the perceived level of marketing orientation within individual firm. Kotler and Bloom (1984) suggest that marketing orientation holds that the main task of the organisation is to determine the needs and wants of target markets and to satisfy them through the design, communication, pricing, and delivery of appropriate and competitively viable offerings.

Marketing orientation measure, according to Kohli et al (1993), could initially be used to establish a baseline level of orientation for the strategic business unit (SBU) within an organisation. Comparative measurements of this sort, they argued, will allow the

organisation to isolate problem areas related to one or more components of market orientation and address these deficiencies in future intervention efforts.

Fisher 91989) observed that, since the Industrial Revolution, business policy in construction industry has moved through various distinct stages from the early twentieth - century pursuit of professional image, through production orientated and increasingly sales orientated to marketing orientated embracing the ideal of directing effort towards identifying customers and their needs and then deliberately directing the company’s resources to satisfying them. Describing these stages of orientation, Fisher stated that in production-orientated firm, there is the believe that the good quality of work is all the marketing that is necessary. Production orientation he further said, developed from many routes such as “professional skill orientation”; “engineering orientation”; and “financial (profit) orientation”.

Hence a comparison of marketing orientation with five other attributes that define corporate values: engineering orientation; production orientation; R&D orientation, profit orientation and professional skills orientation. The respondents were asked to rate their orientation towards each of these six attributes on a 10-ponit scale. From these ratings the relative important indices of all the attributes were computed for each of the three samples (Tables 7.23 to 7.25).

Table 7.23: Contractors’ ratings on orientations in firms

Attributes	Ratings on Marketing Orientation			Total Scores	Relative Importance Index	Attribute Ranking
	≤ 3	4-6	7 ≤			
Engineering	5	9	21	210	0.60	4
R &D	26	7	2	97	0.28	6
Marketing	5	10	20	235	0.67	3
Production	5	3	27	291	0.83	2
Profit	1	2	32	333	0.95	1
Professional skill	13	8	14	196	0.56	5

Table 7.24: Engineers’ ratings on orientations in firms

Attributes	Ratings on Marketing Orientation			Total Scores	Relative Importance Index	Attribute Ranking
	≤ 3	4-6	$7 \leq$			
1. Engineering	1	2	32	315	0.90	1
2. R &D	32	2	1	42	0.12	6
3. Marketing	13	19	3	130	0.37	5
4. Production	13	13	9	172	0.49	4
5. Profit	2	2	31	298	0.85	2
6. Professional skill	5	3	27	280	0.80	3

Table 7.25: Architects’ ratings on orientations in firms

Attributes	Ratings on Marketing Orientation			Total Scores	Relative Importance Index	Attribute Ranking
	≤ 3	4-6	$7 \leq$			
1. Engineering	24	9	2	91	0.26	6
2. R &D	13	13	9	166	0.47	4
3. Marketing	12	14	9	154	0.44	5
4. Production	3	7	25	257	0.73	3
5. Profit	1	11	23	262	0.74	2
6. Professional skill	1	1	33	322	0.92	1

Marketing orientation from the contractors sample (Table 7.23) ranked third with relative important index of 0.67. But for both engineers and the architects samples marketing orientation ranked fifth with relative importance indices of 0.37 and 0.44 respectively. The overall ranking of marketing orientation remains fifth.

Table 7.26: Comparison of ranks on orientation in firms

	*Rankings on the respondents rating on orientations			Combined ranking
	Contractors	Architects	Engineers	
1. Engineering	5	6	1	4
2. R &D	6	4	6	6
3. Marketing	4	5	5	5
4. Production	3	3	4	3
5. Profit	1	2	2	1
6. Professional skill	2	1	3	2

* the lowest value represents the highest value of rating.

1. Professional skills

The results show that within the construction industry, professional ethics is still the predominant value which influences the organisational philosophy. Of the six attributes, professional skills as a corporate ethical value ranked first among others.

2. Profit Orientation

Second in rank is Profit. Profit making is the desire of every business. They need to make profit in order to continue in business, a positive ratio on return on investment is necessary for business survival of any enterprise. Profit is however not the only yardstick for business success. Enterprises with a long-term view of business endeavour to match profitability with customer satisfaction.

3: Production Orientation

The third attribute on the rank scale is production. Construction firms invest so much at developing new construction techniques. Contractor and Designers alike are constantly looking for new methods of production which is cost effective with a view to ensuring cheaper estimate and tighter quotations. Hence the question of how to improve production standards in terms of time, cost effectiveness and quality assurance is always under constant review.

4: Engineering Orientation

The construction industry is one that is under serious scrutiny by professional institutions. The activities of the enterprises within the industry are subjected to several restrictions and guidelines. The fourth attribute is engineering orientation. In some ways this is similar to professional skills orientation, but without commitment to buildings or the industry. Rather the commitment is to a branch of or science of engineering. Probably one other reason for this is the streamlined and narrowed down training of highly scientific professionals from the universities.

5: Marketing Orientation

Marketing orientation as a corporate value was compared with other five values (attributes). Marketing orientation ranked fifth ahead of only R&D. Market orientation is the responsibility of every employee of an organisation. It is therefore proper for the senior management to instil a market orientation philosophy at every level of firm in order to put the right image to the client (Kohli et al 1993). The result as analysed above is a further indication that marketing is yet to be central to business philosophy in the construction industry.

7.6.0. Corporate Values

One of the principal elements under investigation is the measure of the importance attached to marketing objectives and priority given to the marketing function (Corporate value), i.e., how important these objectives are to the overall mission or business objectives to the organisation as perceived by the top management. Corporate values have long been referred to as the central dimension of an organisational culture, which Hunt *et al* (1989) recognised as powerful influence in differentiating one firm from another. Further on this, they argued that corporate values influence organisations' product and services quality, advert content, pricing policies, treatment of employees, relationship with customers, suppliers, communities and environment. Hunt et al (1989) reported an empirical research designed to explore whether corporate values are associated with organisational commitment of marketers and whether corporations desiring highly committed marketing employees take active role in promoting attached values. They concluded that corporate

ethical values, taken alone, may be a strong predictor of commitment and overall performance of such corporations on marketing function.

When Drucker (1954) articulated marketing concept, he noted that marketing was not really a separate management function but rather the whole business as seen from the customer point of view. He explained that marketing concept defines a distinct organisational culture and a fundamental set of shared beliefs and values that put the customer in the centre of the firm's thinking about objectives, strategy and operations.

Several scholars recently have begun to recognise the importance of organisational culture in the management of the marketing function. Weitz, Sujaan and Sujaan (1986) included organisational culture concepts in their development of a model of selling effectiveness. Parasuraman and Deshpande (1984) suggested that greater attention be paid to organisational culture along with structural explanations for managerial effectiveness. Additionally, heightened concern for issues of implementation in marketing strategy and the development of a customer orientation within organisation is also raising questions related specifically to organisational culture (Bonoma 1984; Deshpande and Webster 1986, 1989)

Hunt et al (1989) further described corporate culture as a multifacet construct and explain these facets in terms of :

- (i) behavioural regularities in peoples interactions;
- (ii) norms that evolve in working groups;
- (iii) philosophy that influences organisational policy; and
- (iv) rules for getting along in an organisation.

They then defined corporate value as the assumptions, beliefs, goals, knowledge and values that are shared by organisational members. Corporate values, they added, are a component of corporate culture. Though corporate ethical values are according to this view, one dimension of corporate culture, they have been theorised to be highly influential in directing the actions of individuals in the society in general and in the organisation particularly in the area of setting objective

7.6.1 Corporate Marketing Objectives

Objectives are specific results that an organisation seeks to achieve in pursuing its basic mission. The most important ingredient of successful plan implementation is recognition of the necessity to express plan objectives in quantitative, measurable and objective terms. Strategy objectives are derived from strategic elements. Because the elements are almost always qualitative, they are not amenable to measurement and quantitative analysis. The aim of strategic elements is to put the goals of the owners into language. The objectives are the text from which we can extract and further define quantitative measures which will provide the milestone with which to track progress towards the fulfilment of the defined elements. Etzel and Ivancevich (1974), argue that an additional difficulty in setting objectives is the value of producing measurable objectives. Because objectives are critical to the operation of an organisation, the top management of virtually every organisation makes some attempt at formulating them.

With these considerations in mind, the questionnaire was designed in such a way as to determine first and foremost , criteria for evaluating marketing performance in construction enterprises, whether they be measurable objectives or otherwise. These measures (performance indicators for marketing objectives), were selected on the based on literature review and pilot survey (See Chapter 2). Through these measure the research aims to assess importance attached marketing planning, monitoring and implementation.

To address all these issues we asked the respondents to indicate on a 10 - point likart scale how important each of the marketing objectives are to their top managements. Tables 7.15a - c below show the results of the mean perceived importance rating for each objective for the three categories of the respondents.

Table 7.27 Perceived importance of marketing objectives (Contractors)

Marketing objectives	Rated scores on objectives			Total Scores	Relative Importance weighting	Ranking of objectives
	≤3	4-6	7≤			
Improve Market Share	6	5	24	247	0.70	10
Cost Effective	1	6	28	278	0.79	3
Market Penetration	3	7	25	256	0.73	7
Competitiveness	3	5	27	272	0.78	4
Increase Turnover	5	10	20	234	0.67	11
Improved Profitability	1	1	33	319	0.91	1
Quality Assurance	1	11	23	262	0.75	5
Return on Investment	4	8	23	258	0.74	6
Improve Productivity	6	4	26	227	0.65	12
Innovative Performance	11	9	15	187	0.53	13
Improve Bid Success Rate	5	4	26	247	0.70	9
Improve Firm's Image	4	7	26	254	0.72	8
Maintain Client Loyalty	1	2	32	310	0.88	2

Table 7.28 Perceived Importance of Objectives (Engineers)

Marketing objectives	Rated scores on objectives			Total Scores	Relative Importance weighting	Ranking of objectives
	≤3	4-6	7≤			
Improve Market Share	9	7	19	218	0.62	10
Cost Effective	7	7	21	225	0.64	8
Market Penetration	7	6	22	230	0.66	6
Competitiveness	5	8	22	250	0.71	3
Improve Turnover	4	7	24	241	0.69*	4
Improve Profitability	4	7	24	269	0.77	2
Quality Assurance	8	6	21	209	0.60	12
Return on Investment	6	12	17	225	0.64	9
Improve Productivity	9	2	24	225	0.64*	7
Innovative Performance	12	14	9	150	0.42	13
Improve Bid Success Rate	8	7	20	214	0.61	11
Improve Firms Image	6	9	20	241	0.69	5
Maintain Clients' Loyalty	2	2	31	295	0.89	1

7.29 Perceived Importance of Objectives (Architects)

Marketing objectives	Rated scores on objectives			Total Scores	Relative Importance Weighting	Ranking of objectives
	≤3	4-6	7≤			
Improve Market Share	14	8	13	190	0.54	9
Cost Effective	8	8	19	228	0.65	4
Market Penetration	10	10	15	185	0.53	10
Competitiveness	11	9	15	214	0.61	7
Improve Turnover	9	11	15	220	0.62	6
Improve profitability	6	8	21	252	0.72	2
Quality Assurance	11	5	19	221	0.63	5
Return on Investment	19	5	11	141	0.40	13
Improve Productivity	12	9	14	201	0.57	8
Innovative performance	13	13	9	166	0.47	11
Improve Bid Success Rate	17	6	15	163	0.46	12
Improve Corp. Image	7	10	18	233	0.66	3
Maintain Clients' Loyalty	5	3	27	292	0.83	1

Table 7.30. Ranking of Marketing Objectives

Marketing Objectives	Relative Importance Indices			Mean	Overall Ranking of Objectives
	Contractors	Engineers	Architects		
Improve Market Share	0.70	0.62	0.54	0.63	9
Cost Effective	0.79	0.64	0.65	0.69	5
Market Penetration	0.73	0.66	0.53	0.64	8
Competitiveness	0.78	0.71	0.61	0.71	3
Improve Turnover	0.67	0.69	0.62	0.67	6
Improve profitability	0.91	0.77	0.72	0.80	2
Quality Assurance	0.75	0.60	0.63	0.66	7
Return on Investment	0.74	0.64	0.40	0.59	12
Improve Productivity	0.65	0.64	0.57	0.62	10
Innovative performance	0.53	0.42	0.47	0.47	13
Improve Bid Success Rate	0.70	0.61	0.46	0.60	11
Improve Corp. Image	0.72	0.69	0.66	0.70	4
Maintain Clients' Loyalty	0.88	0.84	0.83	0.85	1

Table 7.27 shows the relative important indices and ranking of marketing objectives in respect to how the contractors perceive their importance. The relative importance indices suggest that marketing objectives are highly valued within the contracting organisations. The lowest value of the indices is 0.53 (innovative performance), which above the midpoint of the index scale of 0 to 1, while the highest is 0.91(improving profitability). Overall average relative importance index of the sample is 0.73. This figure compares very well with Table 7.8 where 62.9% of contractors considered marketing high or very high priority.

From the engineers,(Table 7.28), the most important marketing objective is ‘client loyalty’ (i.e., to maintain the loyalty of existing client) with a relative importance index of 0.84. ‘Innovative performance’ was rated as the least important of all the marketing objectives with an index of 0.42. This was also the case with the contractors. Overall average index by the engineers is 0.65 This is much lower than that of the contractors.

The architects’ most important marketing objective from the results presented on Table 7.29 is, as in the case of engineers, “clients’ loyalty” with relative importance index of 0.83. Innovative performance was rated the least important and ranked 13th with an index score of 0.40. Overall average index for the architects is 0.59

7. 7. 0. Achievement on Marketing objectives

The construction company’s statement of purpose or mission defines in general or descriptive terms how management view the company’s place in the business world and its direction. In long range planning for marketing, objectives fall into two main categories: (1) corporate objectives, relating to the overall firm’s performance and (2) marketing objectives, relating to specific areas of marketplace achievement that will help the firm meet its corporate objectives. Friedman (1984) asserts that assessment is the final link in the never-ending circle that is the planning and marketing process . Hence a section of the questionnaire was designed to address the individual organisation perceived success at achieving the set marketing objectives addressed in Chapter 2.

Table 7.31 Contractors’ Achievement on Marketing Objectives

Marketing objectives	Rated scores on objectives			Total Scores	Relative Importance of weighting	Ranking of objectives
	≤3	4-6	7≤			
Improve Market Share	5	8	22	228	0.65	3
Cost Effectiveness	4	8	23	228	0.65*	2
Market Penetration	3	12	20	219	0.63*	4
Competitiveness	5	11	19	219	0.63	5
Improve Turnover	10	7	18	205	0.58	7
Improve Profitability	9	12	14	197	0.56	8
Quality Assurance	5	12	18	219	0.63	6
Return on Investment	10	13	12	165	0.47	11
Improve Productivity	9	10	16	181	0.52	10
Innovative Performance	19	9	7	119	0.34	13
Improve Bid success rate	13	12	10	163	0.46	12
Improve Corp. Image	10	8	17	190	0.54	9
Maintain Clients’ Loyalty	5	7	23	230	0.66	1

Table 7.32 Engineers’ Achievement on Marketing Objectives

Marketing objectives	Rated scores on objectives			Total Scores	Relative Importance of weighting	Ranking of objectives
	≤3	4-6	7≤			
Improve Market Share	10	14	21	171	0.48	3
Cost Effectiveness	9	15	11	172	0.49	2
Market Penetration	11	19	5	140	0.40	8
Competitiveness	8	20	7	169	0.47	4
Improve Turnover	12	14	9	156	0.44	6
Improve Profitability	13	14	8	157	0.45	5
Quality Assurance	15	14	6	131	0.37	9
Return on Investment	18	11	6	116	0.33	12
Improve Productivity	15	12	8	126	0.36	10
Innovative performance	26	7	2	72	0.20	13
Improve Bid Success Rate	13	19	3	124	0.35	11
Improve Corp. Image	12	17	6	148	0.42	7
Maintain Clients’ Loyalty	5	9	21	220	0.63	1

Table 7.33 Architects' Achievement on Marketing Objectives

Marketing objectives	Rated scores on objectives			Total Scores	Relative Importance weighting	Ranking of objectives
	≤3	4-6	7≤			
Improve Market Share	16	8	11	146	0.41	9
Cost Effectiveness	14	9	12	155	0.43	7
Market Penetration	15	11	9	134	0.38	10
Competitiveness	12	9	14	168	0.48	4
Improve Turnover	12	9	14	194	0.55	2
Improve Profitability	10	11	14	189	0.54	3
Quality Assurance	15	7	13	156	0.44	6
Return on Investment	20	6	9	115	0.33	13
Improve Productivity	13	11	11	149	0.42	8
Innovative Performance	18	8	9	120	0.34	12
Improve Bid Success Rate	16	9	10	126	0.36	11
Improve Corp. Image	15	9	11	157	0.45	5
Maintain Clients' Loyalty	8	5	22	230	0.67	1

Table 7.34 Overall Ranking of Achievements on Marketing Objectives

Marketing Objectives	Relative Importance Indices			Mean	Overall Ranking of Objectives
	Contractors	Engineers	Architects		
Maintain Clients' Loyalty	0.66	0.63	0.67	0.65	1
Competitiveness	0.63	0.47	0.48	0.55	2
Improve Turnover	0.58	0.44	0.55	0.54	3
Cost Effectiveness	0.65	0.49	0.43	0.53	4
Improve profitability	0.56	0.45	0.54	0.52	5
Improve Market Share	0.65	0.48	0.41	0.50	6
Quality Assurance	0.63	0.37	0.44	0.48	7
Improve Corp. Image	0.54	0.42	0.45	0.47	8
Market Penetration	0.63	0.40	0.38	0.46	9
Improve Productivity	0.52	0.36	0.42	0.43	10
Improve Bid Success Rate	0.46	0.35	0.36	0.39	11
Return on Investment	0.47	0.33	0.33	0.38	12
Innovative performance	0.34	0.20	0.34	0.29	13

Contractors

Table 7.31 shows the results of achievement on marketing objectives from the contractors responses. From the results, the contractors' highest achievement was on "clients loyalty" with a relative important weighting of 0.66. The same objective was considered the most important earlier on (Table 7.27). This is probably not surprising as indicated in Chapter 5 that the main emphasis of many contractors is still that good work will attract new orders and that their marketing effort are only aimed at getting on the tender list. This is closely followed by "cost effectiveness" and "improve market share" both with a relative importance weighting of 0.65. The forth and the fifth are "market penetration" and "competitiveness" scoring 0.63 each on the relative importance weighting scale. The least three achieved objectives are, "improved return on investment" (0.47), "improved bid success rate" (0.46), and "innovative performance" (0.34). "Innovative performance" is also the least perceived important objective on Table 7.27. All in all, 10 out of the 13 objectives scored above 0.50 (midpoint on the relative weighting scale).

Engineers

The responses from the engineers on Table 7.32 indicate only one (Clients loyalty) of the 13 objectives scored above 0.5, i.e., above the midpoint of the weighting scale with a score of 0.63. This is followed by "cost effectiveness" (0.49) and "improved market share" (0.48). again as with the case of the contractors, the last two of the 13 objectives are "return on investment" and "innovative performance" scoring 0.33 and 0.20 respectively

Architects

"Clients loyalty" rank highest amongst the 13 objectives as was the case with contractors and engineers scoring 0.67 on the weighting scale. This was followed by "improved turnover" (0.55) and improved profitability (0.54) while the three least achieved objectives were "improved bid success rate" (0.36), "innovative performance" (0.34) and "return on investment" (0.33).

7.9.0. Summary

1. There is sufficient evidence to suggest that marketing has now become top management priority in the industry. The survey shows that 76% of the respondent considered marketing as a high priority. This point is further supported by the fact that all the respondents practice marketing either formally or informally.
2. Construction firms spend a substantial part of their profit on marketing. The survey reveals that on the average two out of three of the respondents spent less than 3% of their annual turnover as marketing expenditure.
3. Marketing function like many other management functions in the construction industry lacks proper planning and control. 66.2% percent of the respondent do not have formal marketing plans and 63.3% do not monitor their marketing activities.
4. 66% of respondents indicated that marketing is being managed and organised as a secondary responsibility by either a director or partner as the case may be in addition to other 'primary' responsibilities.
5. One serious observation from this report is the lack of sufficient use of marketing professionals by the respondents, especially the architectural and civil engineering practices. Only 19.3% of architectural and civil engineering firms have marketing professionals in full time employment in their organisations. Main reason given by most respondents was that the size of their annual turnover does not justify spending say over £20,000 on such professional.
6. The industry in general does not take marketing seriously. On effort expended on marketing activities all the three categories of the respondents score below average on the 10-point rating scale. Contractors put more effort into marketing than the professional firms.
7. The contractors are more marketing orientated than the professional firms and

consider marketing objectives more important compared with the views of the professional firms.

8. The contractors measure of effectiveness of the marketing programmes was higher than those of engineers and the architects.
9. Contrary to what was to be expected, the findings suggest that contractors are more into marketing than the professional firms.
10. Although many appear to realize the importance of marketing, actual performance leaves a lot to be desired.

Chapter VIII

A Model for Evaluating Marketing Function

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complex models as well as the need to make a large number of simplifying assumptions.

In many marketing decisions, however, it is the behavioural relationships that are of essence rather than more easily measured physical economic factors, and, along with some other environmental variables, behaviour is difficult to measure in order to accommodate it into a mathematical model.

8. 2. 1. Modelling Approaches in Marketing

Given the specification of marketing programmes and specification of choice criteria, i.e., a range of possible criteria exist for assessing marketing strategies. In many marketing models the principles of modelling are developed via a consideration of short-run financial modelling (using cost-volume-profit analysis) and long-run financial modelling (using investment analysis) as in the case of BCG and PIMS models (Bonoma and Clark; 1992)

8.2.1.1 The BCG Model

One of the best known approaches to marketing modelling is that of *Boston Consulting Group's Growth-Share and Growth-gain* matrix, known as the BCG growth-share model (Hedley, 1977). This model allows for consideration both to the future potential of the market (i.e. the annual growth rate) and to the strategic business unit's (SBU) competitive position. Within this model, competitive position is measured on a logarithmic scale against the share of the firm's largest competitor. The growth-share matrix model argues that the cash-generating potential of a business may be approximated by examining the growth of that business's market and the relative market share of the business in that market.

Although the BCG matrices have a number of obvious attractions, they do not represent the ultimate management panacea that many of their advocates in the early days argued. The practical values of portfolio analysis, advocated by the BCG model, is influenced significantly both by the quality of the basic data inputs, many of which are difficult to

define and measure, and the broader political and social environments within which decisions are made. Commenting on this, Kotler (1988) cautions that, portfolio analysis models must be used cautiously. They may lead the company to place too much emphasis on market share growth and entry into high growth businesses, to the neglect of managing the current businesses well. The results are sensitive to the ratings and weights and can be manipulated to produce a desired location in the matrix. Furthermore, since an averaging process is occurring, two or more businesses may end up in the same cell position but differ in the underlying ratings and weights. Finally, the models fail to accommodate the synergies between two or more businesses, and this means that marketing decisions for one business at any time may be risky.

8.2.1.2 The PIMS Model

The significance of market share and in particular its influence on return on investment has been pointed out by many studies. The best known of these studies is the PIMS (*Profit Impact of Market Strategy*) research (Abell and Hammond, 1979). The PIMS model is based on data collected from almost 3000 companies, with some of these data going back to 1972 (Bonoma and Clark, 1988). The aim of the PIMS programme has been to identify the most significant determinants of profitability. Using this data, researchers have constructed a model of the relationship between profit and marketing strategy. The analysis of this model leans heavily on market share. The heart of this model is a thirty-seven-variable regression equation that predicts pretax return on investment (ROI). Schoeffler, Buzzell and Heany (1974) reported that six of the thirty-seven variables were of particular importance.

Taken together, these 37 factors explain about 70% of the variability in profitability among the firms in the PIMS data base. By examining the determinants of profitability it is possible to address a series of strategic questions such as:

1. What rate of profit and cash flow is normal for this type of business?

2. What profit and cash flow outcomes can be expected if the business continues with this present strategy?
3. How will future performance be affected by a change in strategy?

A key notion underlying strategic marketing management is that of the relative position of a firm among its competitors, particularly with regards to unit costs, profitability and market share. This is reflected in the PIMS approach by Buzzell and Gale (1987). The respective contribution of each of the variables to overall profitability is estimated by a means of multiple regression model, which allows the impact of weak variables to be offset by strong variables. Once the model has been applied to a given company, it can then be used to assess the relative strengths and weaknesses of competitors in order to identify the best source of competitive advantage.

Although the findings and conclusions of the PIMS study have an initial and pragmatic appeal, the general approach has been subjected to an increasing amount of critical comments in recent years, particularly in the areas of:

- (i) measurement errors
- (ii) apparent deficiencies in the model
- (iii) the interpretation of the findings

Despite its success in providing valuable insights to effective marketing and corporate strategy, there are a lot of reservation about the PIMS approach. For example Baker (1985) has argued that one should be cautious about accepting too readily the relationship between profit and market share claimed as a result of the PIMS approach which is more the result of flexible definitions than reality.

Similarly, Porter (1980) suggests that there is no single relationship between profitability and market share unless one conveniently defines the market so that differentiated firms are

assigned high market shares in some narrowly defined industries and the industry definitions of cost leadership firms are allowed to stay broad (they must because cost leaders often do not have the largest share in every sub-market). Even shifting industry cannot explain the high returns of firms who have achieved differentiation industry wide and held market shares below that of the industry leader. A number of other writers notably, Woo and Cooper (1982), Jacobson and Aaker (1985) have argued that the PIMS approach and its finding are generally what they purport to be. They cautioned that marketing strategist should not blindly pursue market share in the expectation that it will automatically improve profitability.

8.2.1.3 The MPA model

Going beyond the boundaries of financial and accounting systems, Bonoma and Clark (1988) developed a means of accessing the performance of marketing programmes in a way that avoids the limitations of measures that focused narrowly on their economic issues and efficiency. The MPA model relates programme results to management expectation, focusing on effectiveness via a measure of satisfaction. Efficiency is assessed by means of the effort that needs to be expended to achieve a given level of satisfaction. The model allows for those factors that are beyond the enterprise's control but that affect the performance of the marketing programme. Such factors include competitors' actions, economic or demographic variables (See Chapter 5).

The model seeks to offer an approach to marketing performance assessment that measures:

- (i) the degree to which a marketing programme satisfies strategic requirements;
- (ii) the effort that is necessary to produce the satisfaction
- (iii) the effect of the controllable variables on the programmes

This model seeks to combine elements of efficiency and effectiveness in accessing marketing performance. The motivation behind this work was a concern to identify whether

a set of principles exists that explains ‘quality marketing practice’ (i.e. the doing of marketing in an effective and efficient way rather than just the planning of marketing).This model suggests that :

Quality of marketing practice = f (market results),
and
Market results = f(environment, strategy, structure, skills)

These elements are brought together in the following expression:

MP

=

SAT

x

EXT

EFF

Where

MP

=

marketing performance

SAT

=

managers’ satisfaction with the results of effort expended in marketing programmes

EFF

=

effort expended to achieve the results

EXT

=

the impact of external events on marketing effort.

This model (MPA) warranted special attention as the most ambitious of the approaches to marketing modelling to date. Although the model is still in its rudimentary state (developmental phase) many believe it holds great promise for the future (Wilson et al, 1992)

8. 3. 0: The Proposed Model

In this section attention is focused on the developing of fundamental elements for assessing quality of organisational marketing practices. The model uses multi-criteria measures to evaluate marketing practices within the construction industry and unlike the BCG and MPA models discussed above, it accommodates synergies between two or more business to enable the firm to determine its marketing position relative to other firms at any time.

8.3.1. Conceptual Framework

Marketing policies, strategies, objectives and systems are planned within the organisation and to be effective marketing must be a total company function, with externally inspired opportunities matched by internally created capabilities. The marketing function is situated between the external and internal environment and operates at the boundary of the organisation, regulating the organisation's relationship with the external environment. This concept is illustrated in form of a wheel as shown in Figure 8.1. It is made up of four distinctive parts:

- (i) the core (hub) of the organisation which is the decision making unit;
- (ii) the spokes serving as support systems to the marketing programmes;
- (iii) the wheel which represents marketing activities; and
- (iv) the environment which constitutes external opportunities and threats.

The organisation can be described as a hub holding the spokes to the wheel, where the centre is the core of the organisation, that is the strategic business unit (SBU) or the decision making unit of the organisation, where policies, strategies, objectives and systems are formulated, their transmission to the environment being the responsibility of the marketing function serving as a boundary regulator and centrally hinged to this core.

The marketing activities themselves are represented by the wheel linked to the core by the variables (spokes). Achievement of the firms' marketing function is of course influenced by these variable (spokes), while the ability to achieve objectives and goals resting on management support for these elements. Marketing being a continuous process also implies that for an organisation to maintain competitiveness the support and commitment to marketing has to be a central priority of the organisation.

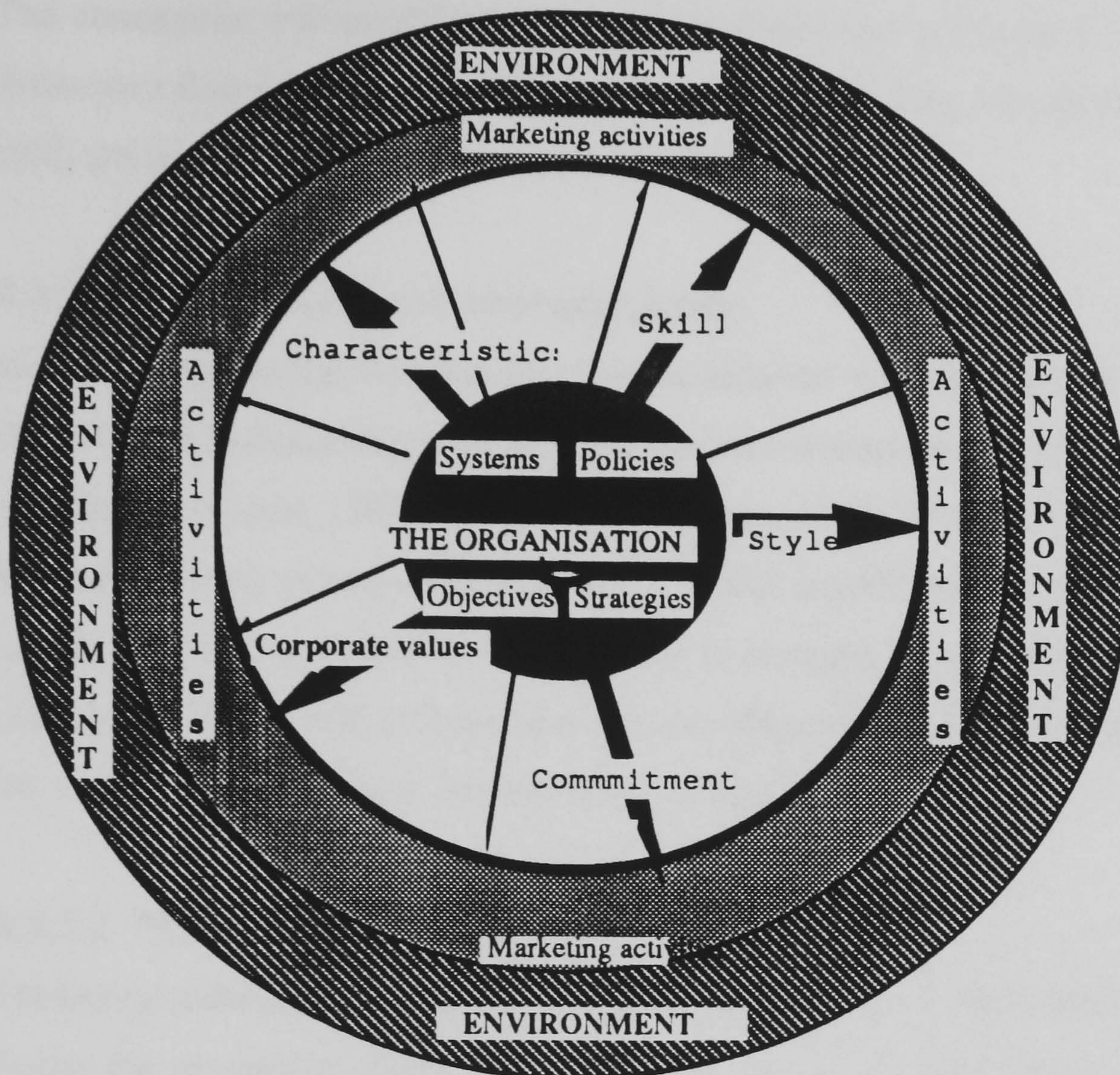


Figure 8. 1. Diagrammatic representation of the model concept

8. 3. 2. Model Construct

The literature review on marketing of construction in Chapter 5 and and the result of the survey reported in Chapter 7 (See also Yisa et al 1995) all revealed that:

- (i) there is a general lack of commitment on the part of the top management in the industry to the marketing function;
- (ii) marketing is performed on an ad-hoc bases;
- (iii) there is a general lack of marketing skill in the industry;
- (iv) there is a lack of understanding of distinctive marketing feature relevant to construction in the industry.

The conceptual framework of the model as illustrated in Figure 8.1 is made up of five distinctive factors: organisational characteristics; marketing management style; marketing skill; organisational commitment; and corporate values.

8.3.2.1 Organisational characteristics

Size of a construction firm has also been understood to have influence on the management commitment to marketing, resources and the kind of marketing programmes perceived to be appropriate (Fisher, 1989; Morgan and Morgan, 1990; Pearce, 1992). Size characteristic has been chosen as one of the constructs of this model not only to determine marketing position but also to enable the organisation to compare its position with those of the same category of size as well as those of distinctive difference in sizes. The synergy presented by the model enables the firm identify firms of equal sizes.

8.3.2.2 Management style

Marketing management style as relating to formal planning, specifically, control and time frame for marketing plans was considered as one of the factors contributing to the shortcoming of marketing in construction. There are theoretical and empirical evidences to show that management style have influence on marketing results (Thomas, 1984; Etzel and Ivancevich, 1974; Bonoma and Clark 1988).

8.3.2.3 Marketing skills

Skills relating to professionalism both within and outside the enterprise such as professional marketing staff and use of professional agents in planning and implementation of marketing programmes. According to Bonoma and Clark (1988), at any given point in time, an organisation has certain quality level for employees' marketing skill. They added that within any organisation, the quality of marketing skills will depend on the availability of suitable trained and motivated staff. Other works relating to effect of skill on marketing results include: Bucklin (1978) and Dhalla (1977). Hence availability of trained marketing staff and the use of the services of marketing agents (consultants) are taken as subvariables of marketing skills.

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Table 8.1 Measures Used to Capture Constructs

Code	Constructs(Variables)		Measures Used
A	Corporate Characteristics		
	A1	Annual Turnover	Question: What is your firm's typical annual turnover? Answer: (Ranges from <£50m = 1 to £1000m+ = 5)
	A2	Number of Employees	Question: Please indicate the size of your firm by No. of staff Answer: (Ranges from <50 = 1 to over 1000 = 5)
B	Marketing Skills		
	B1	Marketing professional	Question: Do you employ full time marketing staff? Answer: (1-point scale ranging from "no" to "yes")
	B2	Use of marketing Agents	Question: How often do you use external marketing agents? Answer: (5-point scale ranging from "never" to "always")
C	Management Style		
	C1	Formal Marketing Planning	Question: (1) Do you carry out formal planning of marketing?
	C2	Monitor of marketing prog.	(2) Do you monitor your marketing programmes? Answer: on a 1- point scale ranges from 'No' to 'Yes'
	C3	Time frame of plan	Question: What is the time frame for your marketing plans Answer: 5- point scale ranging from 0 yr. to over 5 yrs
D	Commitment to Marketing Programmes		
	D1	Marketing Efforts	Question: In your own assessment what amount of effort does your firm put into its marketing activities? Answer: (10-point scale ranging from "no effort" to "Maximum expected effort:)
	D2	Marketing Orientation	Question: What the level of your firm's marketing orientation? Answer: (10-point scale ranging from "not orientated" to "highly orientated")
	D3	Expenditure	Question: What percentage of your firms annual turnover is spent on Marketing programmes Answer: (5-point scale ranging from 0=0.0% to 5 = over 5%)
	Corporate Values		
E	E1	Importance of objectives	Question: Measure of importance of marketing objectives to the organisation Answer: (10-point scale ranging from "not important" to "very important")
	E2	Priority for marketing	Question: What level of priority is given to your marketing programmes Answer: (5-point scale ranging from 0 = "not a priority" to "very high priority")
	Marketing Results		
F	P1	Effectiveness of Marketing Prog.	Question: How effective are these activities in achieving your marketing objectives? Answer: (10-point scale ranging from "not effective" to "very effective")
	P2	Achievements on Objectives	Question: Please indicate the level of your firm's successes on achievements of its marketing objectives over the last 5 years (1990-1994) Answer: (10-point scale ranging from "not successful" to "very successful")

Overall attitude scores generated were interval-scaled capable of offering clues about the respondents' overall feelings towards and object, they are rather crude measures. In using, evaluating, and developing multi-item scale measures, reference was made to Churchill (1979), Nunnally (1979) and American Psychological Association (1985) for a number of guidelines and procedures such reliability analysis and construct validity.

8.3.4. Reliability Analysis

Reliability of each multi-item scale was gauged by the consistency or stability of the ratings generated by the scale using SPSS package. Reliability focuses on whether the scale consistently measures the construct (Parasuraman, 1991; Nunnally, 1978), where Clearly a good attitude scale must be both valid and reliable. Two most popular tests include: test-retest reliability and internal consistency.

Test-retest reliability

This measures the stability of respondents over time and involves administering the scale to the same group of respondents at two different times.

Internal consistency

This is a measure of the correlation among items or sets of items in the scale for all who answer the items. According to Bearden et al, (1993), items comprising a scale (or sub-scale) should show high levels of internal consistency, ascertained by individual corrected item-total correlations, inter-item correlation matrix for all scale items or items proposed to measure a given scale dimension, and a number of reliability coefficients (Lord and Novick, 1973; Peter, 1979; Robinson et al, 1991). Recent rules of thumb for corrected item-total correlation implying 0.50 or greater to retain an item (Bearden et al, 1989, Shimp and Sharma, 1987). Table 8.2 shows results exceeding this value. Internal consistency reliability coefficient can also be evaluated by Cronbach (1951) alpha test. Nunnally (1979) recommended a threshold value of 0.7 for alpha while Robinson et al (1991) suggested 0.60, again the values being obtained from SPSS and also shown on Table 8.2. The alpha

values exceed 0.60 for all the variables of the construct, i.e., the threshold recommended for exploratory research (see also Narver and Slater, 1990).

8.3.5. Construct Validity

Construct validity relates to the nature of the underlying variable measured by the scale as evidence of when the pattern of the correlations among variables conforms to what is predicted by the theory (Cronbach, 1990). First by convergence of item-to-total correlation of items used in measuring the principal component of the construct. This was examined by simple correlations among the subvariables of each principal. The rules of thumb for inter-item correlation matrix vary, however, Robinson *et al* (1991) recommends 0.30 or greater values up to maximum of 1.

Table 8. 2. Total Sample Reliability of Scale (Alpha)

Variables	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted	Cronbach Alpha
Corporate Characteristics				
A1 Sizes of Turnover	0.9809	0.9622	“.”	0.9877
A2 Number of Staff	0.9809	0.9622	“.”	
Marketing Skills				
B1 Marketing staff	0.7632	0.5824	“.”	0.8167
B2 Use of agents	0.7632	0.5824	“.”	
Marketing Management Style				
C1 Formal Planning	0.5406	0.4425	0.5347	0.7577
C2 Formal control	0.6257	0.4933	0.4603	
C3 Range of plan	0.4780	0.2402	0.7950	
Commitment				
D1 Marketing effort	0.6344	0.4024	0.0854	0.7036
D2 Marketing Orientation	0.6601	0.4357	0.0001	
D3 Marketing Expenditure	0.5610	0.3147	0.1766	
Corporate Values				
E1 Importance of objective	0.5432	0.2950	“.”	0.6910
E2 Priority for Marketing	0.5432	0.2950	“.”	
Marketing Results				
P1 Achievement on objectives	0.5618	0.3156	“.”	0.7194
P2 Effectiveness of activities	0.5618	0.3156	“.”	

8.3.6 Multiple Regression Analysis

To further test the strength of relationship between these variables and the marketing results, the data collected is analysed in two steps. First, the multiple regression technique is used to regress the independent variables A_1 to E_2 , upon each of the dependent sub variables - achievement on marketing objectives (F_1) and effectiveness of marketing programmes (F_2). In principle, the multiple regression equation is constructed to assess the simultaneous effect of several variables upon the dependent variable. Usually in the general multiple regression equation, the dependent variable is seen as a linear function of more than one independent variable. Such a general form is expressed as:

$$Y = a_0 + b_1X_1 + b_2X_2 + \dots b_kX_k + \epsilon$$

Where, Y represents the dependent variable and the X s the independent variables. b_1 to b_k , designated as the partial regression coefficients, are the slopes of the regression line for each independent variable, controlling for effects of the other. Thus, b_1 , reflects the amount of change in Y associated with X_1 , holding all other variables constant. a_0 designates the intercept point on the Y axis for all variables and ϵ designates the error component. The interpretation of the intercept, a_0 , is fairly straightforward. It is the average value of Y when each independent variable equals zero. Thus, the value of the dependent variable will be equal to a_0 when the independent variables X_1 to X_k register zero. The interpretation of the slope, b_k = average change in Y associated with a unit change in X_k , when the other variables are held constant, require more attention. By this means of control, it is possible to separate out the effect of X_k itself and free it of any distorting influences by the other independent variables. Such a slope is called partial slope or partial regression coefficient. Thus, according to the above regression, partial slope b_2 estimate that with a unit change increase in the magnitude of the independent variable X_2 ,

the average value of the dependent variable will increase by b_2 units.

Secondly, to assess the goodness of fit of a multiple regression equation, the R^2 or the coefficient of multiple determination is employed. The R^2 for the multiple regression equation indicates the proportion of variation in Y ‘explained’ by all the independent variables. For example, $R^2 = 0.69$ indicates that all of the independent variables X_1 to X_k , together account for 69% of variance in the dependent variable (Parasuraman, 1991; Mohsini and Davison, 1992).

Table 8.3 Determinants of Achievements on Marketing Objectives (F2)

Dependent Variable. P1 Achievement on Marketing Objectives					
Variable	B	SE B	95% Confidence	T	Sig T
A1	-3.710	11.706	-26.971	-.317	.7520
A2	3.662	12.870	-21.910	.285	.7766
B1	.425	6.310	-12.111	.067	.9463
B2	-.510	2.714	-5.904	-.188	.8511
C1	1.770	7.210	-12.556	.246	.8066
C2	1.810	7.848	-13.784	.231	.8181
C3	.907	2.788	-4.632	.326	.7455
D1	.199	.127	-.053	1.568	.1205
D2	.827	1.199	-1.554	.690	.4918
D3	4.155	3.534	-2.866	1.176	.2428
E1	.503	.102	.300	4.935	.0000
E2	-.756	2.702	-6.126	-.280	.7802
(Constant)	-1.767	10.174	-21.982	-.174	.8625
Multiple R	.802				
R Square	.643				
Adjusted R Square	.534				
Standard Error	24.433	F =	5.23929	Signif F =	.0000

As the effects of the independent variable (A1 to E2) upon the two measures of marketing results (P_1 & P_2) are measured separately, the results and their discussion are also presented in two separate tables (Tables 8.3 & 8.4).

The results of the multiple regression of all the variables upon “achievement on marketing objectives” (P_1) are presented in Table 8.3. They accounted for 64.3% of the variance in achievement on marketing objectives and for 71.5% of variance in effectiveness of marketing activities. These are very high proportions of total variances in performance indicators and the probability of them occurring by chance is 0.000 in both cases.

Table 8.4: Determinants of marketing Effectiveness

Dependent Variable	Variable. B	P2 SE B	Effectiveness of Marketing Programmes 95% Cdnce	T	Sig T
A1	-6.049	7.968	-21.882	-0.759	0.449
A2	5.191	8.7601	-12.215	0.593	0.555
B1	-6.316	4.295	-14.850	-1.471	0.145
B2	1.519	1.847	-2.152	0.822	0.413
C1	6.120	4.907	- 3.631	1.247	0.216
C2	-0.373	5.342	-10.989	-0.070	0.944
C3	-1.180	1.897	-4.950	-0.622	0.536
D1	0.872	0.086	0.700	10.085	0.000
D2	0.977	0.816	-0.645	1.198	0.234
D3	7.463	2.405	2.684	3.103	0.003
E1	0.036	0.069	-0.101	0.526	0.600
E2	-2.172	1.839	-5.828	-1.181	0.240
(Constants)	-6.043	6.924	-19.803	-0.873	0.385
Multiple R	0.846	R Square	0.715		
Adjusted R Square	0.715				
Standard Error	16.631	F =	18.657	Signif F =	0.000

8.4.0. Model Formulation

This model uses multi-criteria measures to evaluate performance of marketing activities of a firm accommodating synergies between two or more business to enable the firm to determine its marketing position relative to other firms at any time. The main aim of the model being to combine these measures into one performance index . This representing a performance grading system for assessing the marketing position of a firm within the overall construction industry. This model could be a management tool to examine and to predict: the firm’s marketing effectiveness; critical marketing activities; critical resources

allocation; effort required to achieve a set of marketing objectives; and a firm’s marketing position.

8.4.1. Data Entry

A major problem with research of this nature relates to measurement issues, particularly the responses being subjective and as such, a one level judgment is likely to be impaired by response bias and also may as a results make it difficult to separate accurate estimate from preference (Reukert and Walker, 1987). For example, in answer to the question of achievement on marketing objective, a respondent may decide to give a higher rating to say”cost effectiveness” but lower rating on “profitability” but even though comparatively the firm may have achieved more in relative term on “profitability” probably because the firm is very profit (financial) orientated. Secondly, the survey included firms of different sizes ranging from annual turn over of <£10m/annum to over £1,000m; where the flow of resources and information may differ even when firms are equal size, different experience, preferences, priority, objectives and probably different level of understanding of marketing are likely to pertain (Cohen, 1988).

Thus the scales employed at the individual level as shown on Table 8.1, are aggregated to obtain relevant statistics, in filtering out the possibilities likely to generate bias and preference without tampering with the credibility of the initial assessments (Cohen and Cohen,1975; Churchill, 1979; Cohen, 1988; and Kohli et al, 1990). The numerical ratings as shown in Table 8.5 were then transformed into relative importance indices (R) in the range of 0 to 1. The expression for this relative importance index is given as:

$$r_{ji} = \frac{\sum_{j=1}^N T_{ji}}{M * N} \tag{1}$$

- Where:
- T_{ji} = rating given to variable i by respondent j
 - K = number of variables in the construct. In this case the number of principal component of the construct (see table 8.1) is 5
 - M = highest score on the measuring scale
 - N = number of respondents

For example, relative importance index for marketing effort as shown on Table 8.5 (column 3) is 0.30. To demonstrate how this is calculated, the sum of ratings on effort (D1) from all respondents is 315 (column 2). Hence the relative importance index of effort on marketing activities is:

$$r = \frac{315}{10 * 105} = 0.30$$

- In this case,
- N = 105, i.e., number of sample analysed (see Chapter 7)
 - M = 10 (effort on marketing was measured on a 10-point scale.

This procedure was followed for all the variables shown on Table 8.5 and the mean of relative indices for all the items computed to give the overall indices (R_p) for the principal components of the construct (column 4).

Table 8.5. Relative Importance Indices (R) and Weighted constants (W)

Constant Variable (1)	Scores on Factors (T) (2)	Relative. Imp. Index (r) (3)	Overall Rel. imp. Index (R _p) (4)	Relative. Weighted Constants (W) (5)
A Corporate Characteristics				
A1 Annual Turnover	173	0.33		
A2 Number of Employees	163	0.31	0.32	0.16
B Marketing Skills				
B1 Marketing professional	41	0.39		
B2 Use of marketing Agents	105	0.20	0.29	0.15
C Management Style				
C1 Formal Marketing Planning	50	0.48		
C2 Monitor of marketing prog.	54	0.51		
C3 Time frame of plan	236	0.45	0.48	0.24
D Commitment				
D1 Marketing Efforts	315	0.30		
D2 Marketing Orientation	536	0.51		
D3 Expenditure	115	0.22	0.34	0.17
E Corporate Values				
E1 Importance of objectives	546	0.52		
E2 Priority for marketing	305	0.58	0.55	0.28
Total			1.98	1.00

8.4.2. Weighted constants

Having computed the relative importance indices of all the variables, the next step taken was to convert these indices into relative weighted constants (W) for all the principal components. Weighted constants indicate the relative contribution of these variables within the construct (After Cohen,1988, Wilson et al, 1992). The following expression was used to calculate Wfor the five principal components:

$$W_i = \frac{R_i}{\sum_{i=1}^5 R_i} \dots\dots\dots (2)$$

Where, W_i = relative weighted constant of the i^{th} principal component.

For example, consider W for ‘management style’ which has relative importance index (R) of 0.48,. The sum of relative importance indices for all the five principal components is 1.98 i.e., $0.32+0.29+0.48+0.34+0.55$ (See Table 8.5, column 4). Therefore the weighted constant for ‘management style’ is; $0.48/1.98 = 0.24$ (column 5). And as shown on Table 8.5 these weighted constants all sum to 1.

8.4.3 Weighted Scores

Subsequently, from the weighted constants (Table 8.6) weighted scores (S) are calculated to indicate to a firm its marketing position within the general marketing scenario of the industry. Weighted scores are calculated as the product of Weighted constant and the mean scores (Φ). Hence the expression for actual weighted scores is given by,

$S_{Ai} = W_i \times \Phi_{Ai} \dots \dots \dots (3),$

while the expected (ideal) weighted scores are derived from,

$S_{Ei} = W_i \times M_i \dots \dots \dots (4)$

Computed value of actual weighted scores (S_A) and expected weighted scores (S_E) are shown in Table 8. 6 (columns 4 and 6 respectively).

For example, actual weighted score (S_A) for “corporate characteristics” from Table 8.6 (column 4) is 0.51. To illustrate how this is calculated, the total scores of the sub-variables of “corporate characteristics” (i.e., turnover and number of employees) are summed up and then divided by the number of sample to give mean score (Φ) on the principal component. This Φ is then multiplied by the weighted constant for the same component (W) to give S_A .

Hence for corporate characteristics from is:

$$S_A = \text{Weighted constant (W)} \times \frac{\text{Total scores on A1} + \text{Total score on A2}}{\text{Number of sample (respondents)}}$$

That is,

$$S_A(\text{Corporate characteristics}) = W \times \frac{173 \text{ (A1)} + 163 \text{ (A2)}}{105} \quad (\text{Table 8.6 column})$$

$$= 0.16 \times 3.20 = 0.51$$

The values of actual weighted scores and expected (ideal) weighted score as expressed by equations (3) and (4) respectively are presented on columns 4 and 6 of Table 8.6.

Table 8.6 Weighted Scores on Principal components

Variables (1)	Relative. Weighted Constants (W) (2)	Actual *Mean Scores (Φ _A) (3)	Actual Weighted Scores (M) (4)	Maximum Score on Scale** (S _A) (5)	Expected Weighted Scores (S _E) (6)
Corporate Characteristics	0.16	3.20	0.51	10	1.60
Marketing Skills	0.15	1.44	0.22	6	0.90
Management Style	0.24	1.44	0.35	7	1.68
Commitment	0.17	9.60	1.63	25	4.25
Corporate Values	0.28	8.10	2.70	15	4.20

8.4.4. Performance Index

Performance index for each variable is the actual weighted scores expressed as percentages of the sum of expected weighted scores. Computed values for actual performance index (I_{Ai}) for variable i is given in Table 8.7 and given as:

Actual Performance index (I_{Ai}) =
$$\frac{S_{Ai}}{\sum_{i=1}^5 S_{Ei}} * 100 \dots\dots\dots (5)$$

The actual performance index for each principal component is is shown in column 3 on Table 8.8. The expression for the expected performance index (I_{Ei}), for variable i is given by,

Expected Performance index (I_{Ei}) =
$$\frac{S_{Ei}}{\sum_{i=1}^5 S_{Ei}} * 100 \dots\dots\dots (6)$$

and the values are shown on column 6 of Table 8.7 below.

Table 8.7. Performance Index Grading Function (I)

Variable (1)	Actual Performance Index			Expected Performance Index		
	Actual Weighted Scores (SA) (2)	Actual Perf. Index (I _A) (in %) (3)	Grade Function (Cum.I _A) (G _A) (4)	Expected Weighted Scores (S _E) (5)	Expected Perf. Index (I _E) (in %) (6)	Grade Function (Cum.I _E) (G _E) (7)
Corporate Characteristics	0.51	4.02	4.02	1.60	12.68	12.68
Marketing Skills	0.22	1.70	5.72	0.90	7.13	19.81
Management Style	0.35	2.73	8.45	1.68	13.22	33.03
Commitment	1.63	12.87	21.32	4.25	33.68	66.71
Corporate Values	2.70	18.50	39.80	4.20	33.29	100.00
	5.41		39.80	12.64		100.00

8.4.5. Performance Grading Function

In order to facilitate the interpretation of performance index for an individual firm, a performance grading function is developed in the form of a chart. This performance grading function is equivalent to the cumulative distribution function of both (I_A) and (I_E).

Let G_A be the actual performance grading function and varies from 0 to 100%.

Then,

$$G_A = \sum_{i=1}^5 I_{Ai} \dots \dots \dots (7)$$

G_A is the actual performance grading function obtained from the sample data , i.e., the integration of the I_A function expressed as the percentage of the sum of the S_E function (See eqn 5) and the expected (ideal) grading function grading G_E is given by,

$$G_E = \sum_{i=1}^5 I_{Ei} = 100 \dots\dots\dots(8)$$

The performance grading function G_A , also represents the average of the industry’s performance grading function with the G_E representing the upper band(i.e., the ideal situation). These two grading functions are plotted on Figure 8.2. The relationship between these two grade functions can be expressed as G_B Where, G_B is the performance band region, i.e., the region between the upper (Expected) and the lower (industry’s average)grade functions. Now for an individual firm j , the performance index grading function is G_j and,

$$G_j = \sum_{i=1}^5 I_{ji} \leq 100 \dots\dots\dots(9)$$

If a firm’s marketing is satisfactory its grading function (G_j), should fall within the G_B region. That is;

$$G_A \leq G_j \leq G_E \dots\dots\dots(10)$$

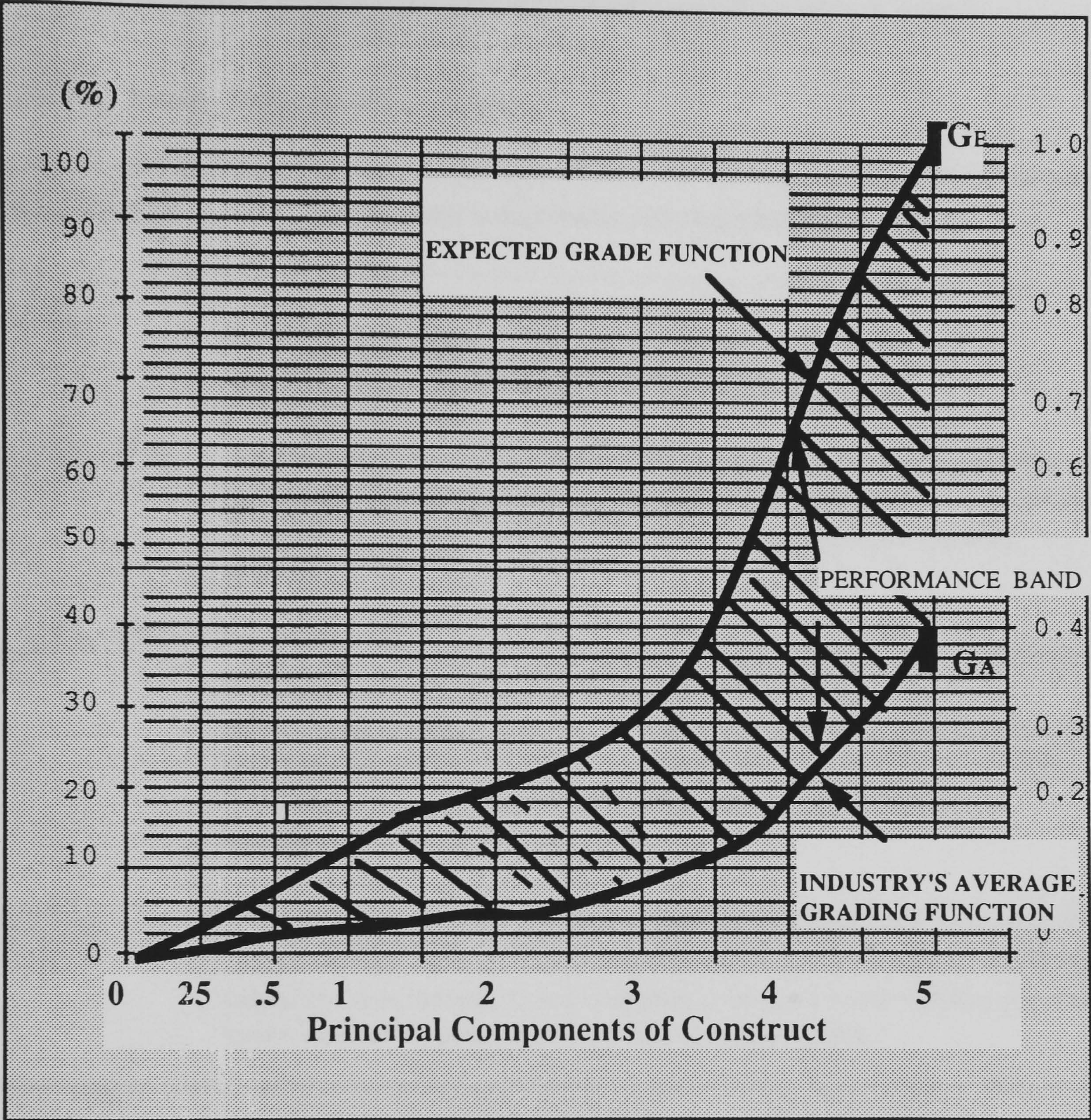


Figure 8.2. Performance Grading Function for Evaluating Marketing practice

This model provides construction marketers with performance gradings upon which to evaluate the firms marketing practices, by plotting the performance grading function as in Figure 8.2, the firm's marketing position relative to the overall industry's average can be determined. Table 8.9 gives the management interpretation of the model for various ranges

of the performance grade and provides useful suggestions for courses of actions.

Table 8.8. Model Interpretation System

Grading Ranges	Management interpretation and suggested course of action
$G_J = G_E$	An ideal marketing situation; indicating total management satisfaction with its marketing policy and implementation; no adjustment action is required.
$G_A < G_J \leq G_E$	At this level no danger is anticipated in the near future. However due to dynamic nature of the industry, as a result of which competition is ever on the increase, minor changes may be required by the management in order to maintain existing level of competitive advantage.
$G_A \leq G_J < G_E$	At this range, the firm marketing position is within the industry's average performance index. The firm's marketing policies need considerable adjustment action because it may be difficult at this level to maintain existing level of competitiveness and to penetrate new markets. The firm may probably consider employing more marketing skills; either by employing professional staff or employ the services of external marketing agents to help formulate policies.
$G_J < G_A$	A firm with performance index within this range is at performance level lower than the industry's average. There is very low probability that such a firm can survive any form of competition in the industry. If the management hopes to continue in business then it will require a complete overhaul of its marketing strategy and policies.

8.5.0. Limitations of the Model

The main limitations arise from the underlying assumptions and accuracy of data namely:

1. There is an awareness to a certain extent of the role of marketing within the companies seeking to evaluate their marketing potential.

2. That those fundamental elements used in this model are understood as essential constructs in evaluating marketing marketing of construction services.
3. These firm are actively engaged in construction works within the UK construction industry.

8.6.0. Guide to Model Implementation

The model can be used by a firm to evaluate its marketing practices summarised as a performance grade function presented on Figure 8.2, with the lower band for the performance index representing the industry actual performance index, in this case, 39.8% which is just about average of the of the maximum expected. Implementation of the model should be carried out in the following steps:

- I Assign ratings to all the sub-variables of the construct based on the scales provide for self evaluation (See Table 8.1)
- II Sum up all the rating under each principal component to obtain total score (T_1, T_2, \dots, T_5) for each principal component as in Table 8.5.
- III Apply equations (3) to compute weighted scores (S_1, S_2, \dots, S_5) for each principal component as shown on Table 8.6
- IV Compute the performance indices (I_1, I_2, \dots, I_5) using equation 5 (See Table 8.7).
- V Sum up the cumulative indices and plot the actual performance index.
Use Figure 8. 2 to forecast your firm's overall marketing position and recommend next line of action.

8.7.0. Summary

Currently a comprehensive quantitative model for evaluation of marketing function is not available to assist construction firms in assessing their marketing practices. This paper presents a quantitative model based on elements of efficiency and effectiveness of marketing practices within the UK construction firms. Although still at a preliminary stage it holds a potential as an effective instrument for evaluating marketing practices in construction.

The motivation behind its development was a concern to identify a set of principles exists underlying 'quality marketing practice' (i.e. the carrying out of marketing in an effective and efficient way rather than just the planning of marketing), for assisting the managers to follow a targeted approach to performance improvement thereby facilitating more efficient evaluation of overall achievement of the organisation's marketing objectives. It can also be used to:

- (i) evaluate a firm's specific marketing position based on efficient marketing practices;
- (ii) locate marketing position relative to other firms operating within the same environment;
- (iii) assess the effort required to achieve a set of marketing objectives;
- (iv) define and measure a firm's corporate values in the marketing function;
- (v) establish their marketing orientation and effectiveness of the individual firm's marketing programmes; and
- (vi) determine a firm's competitive position within a market segment.

Chapter IX

Model Validation Analysis

Chapter Nine

Model Validation Analysis

9.1.0. Introduction

In Chapter 2, which describes the methodology adopted for this research, various variables that were thought to be directly or indirectly related to the operational and strategic characteristics of marketing practices in the construction industry were mentioned (section 2.4.0). A survey was then conducted to investigate these variables as reported in Chapter 7. The relationships between these variables were investigated through various statistical techniques using *Statistical Package for Social Sciences* (SPSS). Subsequently, a model for evaluating marketing practices was developed in Chapter 8. Steps were also taken in Chapter 8 to investigate the linearity of the relationship between marketing results and each of the principal components of the model (8.5.0). This chapter describes procedures adopted to validate the model and discusses the validation exercise.

9.2.0: Procedures for Validation

It was explained in Chapter 8 that models facilitate conceptions of realities that allow the effects of alternative courses of action to be more readily anticipated and measured. Further to this it was argued that models function as part of the management process. The complex nature of organisational behaviours and the environment in which a firm operates make it difficult to obtain exact solution to any management problem. In most cases only approximate solutions are obtained by making significant assumptions. But provided that certain rules are obeyed the behaviour of the critical elements in the model will accurately simulate a full scale behaviour. If the above assumption is true, then going through the same experimental and analytical procedures as carried out when establishing this model makes it possible to validate the reliability of this model. It is a basic rule in science that experiments should be reproducible. On this basis a three step procedure was adopted for the validation of this model. First, using an independent survey to establish whether or not the performance grading function obtained in Chapter 8 was a true representative of the industry's marketing performance. Second, the model was applied to five individual firms in order to determine not only their grading function but also to compare their marketing

position compare to one another. Third, a sensitivity analysis to investigate the responses of the grading function to variations in principal elements of the model was carried out using a spread sheet developed with MICROSOFT EXCEL package.

9.2.1. Validating the Industry’s Average Grading Function

Recall in Chapters 2 & 7 that a self-administered questionnaire was posted to 450 construction firms and that of the 115 returned, 105 were analysed and used for the development of the model described in Chapter 8. The average performance grading function produced for the industry from the model in Chapter 8 is 38.90 %. To validate this model another set of 100 of the same questionnaire used in the previous survey was dispatched to firms which were not included in the original list. Out of the 100 firms targeted, 30 of them responded.

Table 9.1.Relative Importance Indices (R) and Weighted constants (W)

Constant Variable (1)	Scores on Factors (T) (2)	Rel. Imp. Index (r) (3)	Overall. Indices (R _p) (4)	Weighted Constants (W) (5)
A Corporate Characteristics				
A1 Annual Turnover	120	0.46	0.39	0.19
A2 Number of Employees	50	0.33		
B Marketing Skills				
B1 Marketing professional	10	0.33	0.29	0.14
B2 Use of marketing Agents	38	0.25		
C Management Style				
C1 Formal Marketing Planning	14	0.47	0.48	0.24
C2 Monitor of marketing prog.	16	0.53		
C3 Time frame of plan	64	0.43		
D Commitment				
D1 Marketing Efforts	89	0.30	0.36	0.18
D2 Marketing Orientation	181	0.37		
D3 Expenditure	64	0.42		
E Corporate Values				
E1 Importance of objectives	150	0.50	0.50	0.25
E2 Priority for marketing	75	0.50		
Total			2.00	1.00

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From the SPSS output the value of Chi-square (χ^2) is 2.15 at 95% confidence with one degree of freedom (See Appendix F). This is less than the critical value ($\chi^2_{0.5} = 3.841$). Since the computed value of Chi-square does not exceed the critical value of 3.841, it is a strong indication that the values G_V are similar to those of G_A (Keller et al, 1988). The absence of large differences in the values of G_A and G_V shows that the model is a true representative of industry’s marketing grading function.

Table 9.3. Performance grading function from validation sample

Principal Component of Construct	Expected Weighted Scores (S_E)	Weighted scores (S_V)	Performance Index (%) (I_V)	Grading Function (G_V)
(1)	(2)	(3)	(4)	(5)
Corp. Characteristics	1.60	0.76	6.01	6.01
Marketing Skills	0.90	0.22	1.74	7.75
Management Style	0.24	0.74	5.86	13.61
Commitment	4.25	1.58	12.51	26.12
Corporate values	4.20	1.88	14.89	41.01
Total	12.63	5.18		41.01

Table 9.4 Performance Grading Functions

Principal Component of Construct	Expected Grading Function (G_E)	Industrial Grading Function (G_A)	Validation Grading Function (G_V)
(1)	(2)	(3)	(4)
Corp. Characteristics	12.68	4.02	6.01
Marketing Skills	19.81	5.72	7.75
Management Style	33.03	8.45	13.61
Commitment	66.71	21.32	26.12
Corporate values	100.00	38.90	41.01
Total	100.00	38.90	41.01

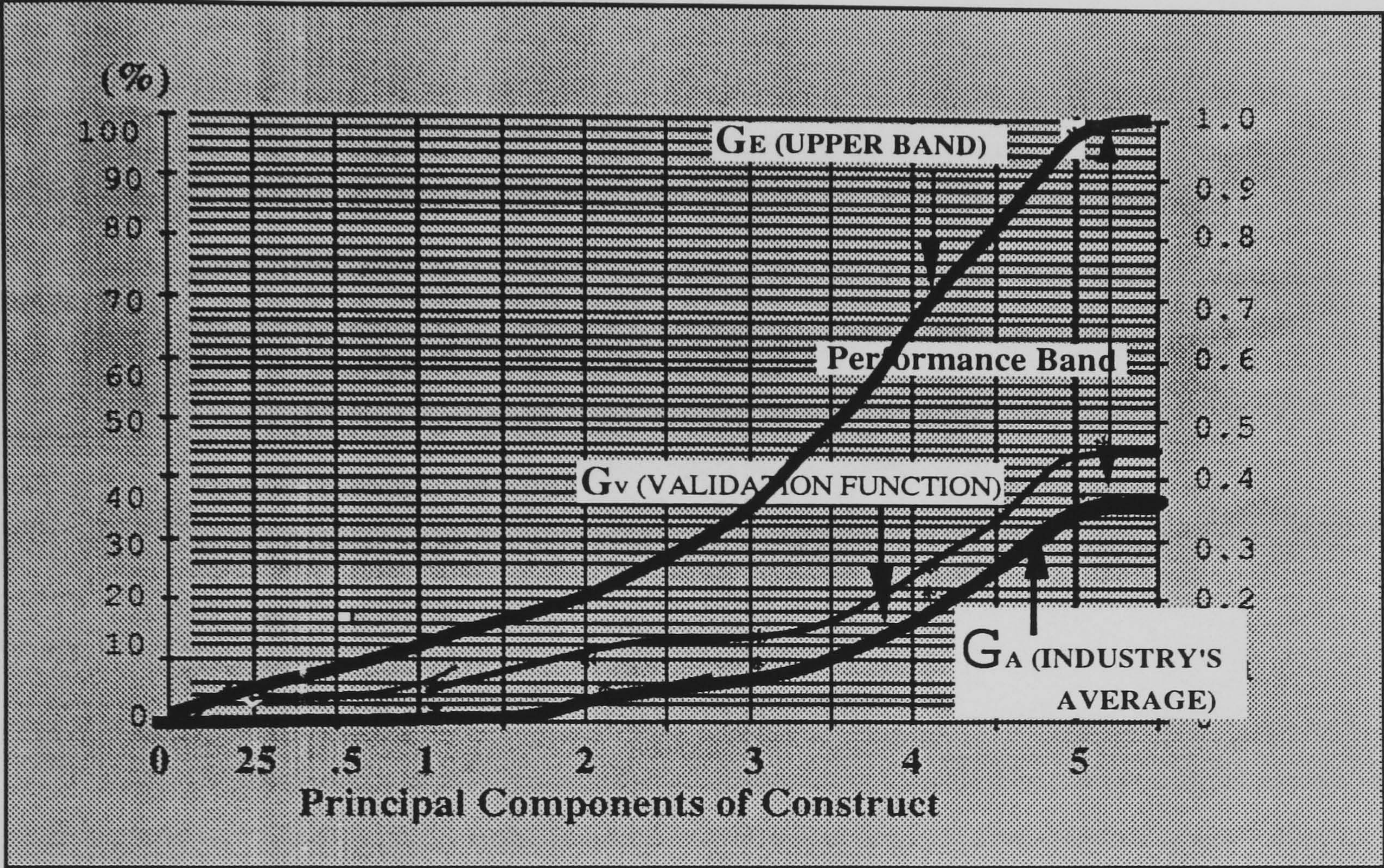


Figure 9.1. Model Validation Grading function

Taking the statistical test for this validation a step further, Wilcoxon Matched-Paired Signed-Ranks Test was conducted. This test is used to compare two populations located in the same area as in the case of the model samples and validation samples obtained as a result of two separate surveys from the same industry. To reject the preposition that the two functions (G_A and G_V) have the similar characteristics, the Wilcoxon-Matched Paired Signed-Ranks Test must satisfy either $Z < -Z_{\alpha/2}$ (two-tailed) or $Z < -Z_{\alpha}$ (one-tailed). The SPSS output for this test gives $Z = -0.695$ with a 2-tailed $p = 0.5002$, $Z > -Z_{\alpha/2} = -1.96$. Hence there is sufficient evidence to indicate that the validation function (G_V) is similar in characteristics to the model function (G_A).

9.2.2. Worked Examples with Five Individual Firms

The second step taken to facilitate the validation exercise was to demonstrate how this model can be applied to individual firms. Responses from five firms which were not among the previous sample used to develop the model were used for worked examples. The ratings on all the items by the five firms are presented on Table 9.5. These scores were aggregated to obtain total scores by individual firm for each of the principal component of the construct . From these scores the weighted scores as shown on Table 9.6 were computed by applying expression (3) from Chapter 8. Having obtained the weighted scores, the performance indices were calculated (Table 9.5) to obtain the performance grading function for each of the firms. Finally these function were plotted on the chart as shown by Figure 9.2.

Firm I

From the plots of the grading functions it was possible to identify the marketing position for each of the firms. For example, the performance grading function for Firm 1 (G_{F1}) , summed up to 54.%. A close examination of this firm shows that it falls within the group of firms with an annual turnover of < £50m and employs between 500-1000 workforce. This firm has a marketing professional as an employee but only makes occasional use of marketing consultants.

For greater and more effective marketing results, it may be required that this firm makes regular use of marketing consultants in the formulation of its marketing strategies. Still from Table 9.5, this firm although it operates formal marketing planning and monitors its progress, the plans are short term. Hence it may be necessary to to consider long-term marketing planning.

Another important point of note is the firm’s overall perception of marketing. From Table 9.5, it is clear that this firm considers marketing as a high management priority, its marketing objectives very important and has a high level of marketing orientation. However, only very little effort is expended on its marketing programmes and little expenditure on marketing. As a way of improvement, there are three key areas that need to be addressed:

- (i) greater use of marketing agents (consultants);
- (ii) consider long-term planning;
- (iii) improve marketing efforts;
- (iv) probably to consider increase of its marketing expenditure.

Firm II

The positions of Firm 2 falls below the average performance grading function (G_A) for the industry. For this firm there is very low probability that such firm can survive any form of competition within the industry. If the management hopes to continue in business it will require a complete overall of the firm's marketing policies. Looking closely from Table 9.5, firm 2 can be described as a medium size company (annual turnover between £100m to £500m and employs over 1000 people). It has professional marketing staff but makes only occasional use of marketing consultants. The major marketing problem of this firm is in its style of marketing management. It has no formal marketing plans, not even on short-term basis and does not monitor its marketing programmes. There is very little commitment and effort into marketing activities in the firm. No priority is given to marketing function by the management of this firm. The overall performance grading function of this firm is 38.61%. This slightly below the average of the industry. The key principal components to consider in this firm if there has to be any improvement in its marketing programmes are, management style and commitment to marketing programmes.

Firm III

Firm 3 also falls below the average performance grading function (G_A). Its annual turnover falls within the category with annual turnover of less than £50m. It employs less than 50 employees. It is a relatively small firm. From Table 9.5, it is clear that there is an absence of marketing skill in this firm. There is no professional marketing employee and does not employ the services of external marketing agents. There is no marketing plan. This firm can be classified as a non-marketer. The overall performance grading function is 30.30%. This far below the average for the industry. If this firm is to survive competition in the future it will seriously need to overhaul its entire corporate strategy and incorporate marketing as a key management function.

Firm IV

The best of the five firms evaluated for this validation exercise was Firm 4. Its performance grading function summed up to 70.22%. This falls within grading range II ($G_{F1} \leq G_E$). For this firm, there is a very high level of management satisfaction with its marketing policies and no danger can be anticipated in the near future. Minor changes may, however, be required by the management in order to maintain existing level of competitive advantage. Probably it may require to increase its marketing expenditure and employ regular use of external agents in order to maintain this level of performance.

Firm V

The grading function for Firm 5 (G_{F5}) also falls within the sample range, i.e., $G_A \leq G_{F1}$ & $G_{F5} < G_E$ (48.41%). Although the marketing positions of this firm is above the industrial average function, its marketing policies need considerable changes since it is likely to be uncompetitive in the event of upwards shift in the overall industry's grading function if for example there is a down turn in work load with consequent increase in competition. A closer look at the responses on Table 9.5 suggests that this firm is of the same size (characteristic) with Firm 2. The main problem, however, with this firm is that there is an absence of marketing skill. The firm may probably consider employing more marketing skills; either by employing professional staff or employ the services of external marketing agents to help formulate policies.

Table 9.5. Rated Scores on Constructs (T)

			Firm 1	Firm 2	Firm 3	Firm 4	Firm 5
Construct Variable	W	S _E	T ₁	T ₂	T ₃	T ₄	T ₅
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A Corporate Characteristics							
A1 Annual Turnover			1	3	1	4	3
A2 Number of Employees			<u>4</u>	<u>5</u>	<u>1</u>	<u>5</u>	<u>5</u>
	0.16	1.60	5	8	2	9	4
B Marketing Skills							
B1 Marketing professional			1	1	0	1	0
B2 Use of marketing Agents			<u>2</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>0</u>
	0.15	0.90	3	3	0	3	0
C Management Style							
C1 Formal Marketing Planning			1	0	0	1	1
C2 Monitor of marketing prog.			1	0	0	1	1
C3 Time frame of plan			<u>2</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>2</u>
	0.24	1.68	4	0	0	6	4
D Commitment							
D1 Marketing Efforts			2	3	2	5	5
D2 Marketing Orientation			6	2	5	7	2
D3 Expenditure			<u>1</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>
	0.17	4.25	9	7	9	13	8
E Corporate Values							
E1 Importance of objectives			7	6	7	7	6
E2 Priority for marketing			<u>4</u>	<u>1</u>	<u>0</u>	<u>5</u>	<u>3</u>
	0.28	4.20	11	7	7	12	9
Total	1.00	12.64					

Table 9.6. Weighted Scores (S)

	Firm 1	Firm 2	Firm 3	Firm 4	Firm 5
Construct Variables	S_1	S_2	S_3	S_3	S_5
	$(W_i * T_{1i})$	$(W_i * T_{2i})$	$(W_i * T_{3i})$	$(W_i * T_{4i})$	$(W_i * T_{5i})$
(1)	(2)	(3)	(4)	(5)	(6)
Corp. Characteristics	0.80	1.28	0.32	1.44	1.28
Marketing Skills	0.45	0.45	0.00	0.45	0.00
Management Style	0.96	0.00	0.00	1.44	0.94
Commitment	1.53	1.19	1.53	2.21	1.36
Corporate Values	3.08	1.96	1.96	3.36	2.52
Total	5.44	4.88	3.81	8.90	6.10

Table 9.7. Performance Indices

	Firm 1	Firm 2	Firm 3	Firm 4	Firm 5
Construct Variables	I_1	I_2	I_3	I_3	I_5
	$(S_{1i} * 100)$	$(S_{2i} * 100)$	$(S_{3i} * 100)$	$(S_{4i} * 100)$	$(S_{5i} * 100)$
	ΣS_{Ei}	ΣS_{Ei}	ΣS_{Ei}	ΣS_{Ei}	ΣS_{Ei}
(1)	(2)	(3)	(4)	(5)	(6)
Corp. Characteristics	6.32	10.13	2.53	11.40	10.13
Marketing Skills	3.56	3.56	0.00	3.56	0.00
Management Style	7.60	0.00	0.00	11.40	7.59
Commitment	12.10	9.41	12.10	17.48	10.76
Corporate Values	24.37	15.51	15.51	26.58	19.94
Total	53.95	38.61	30.30	70.22	48.41

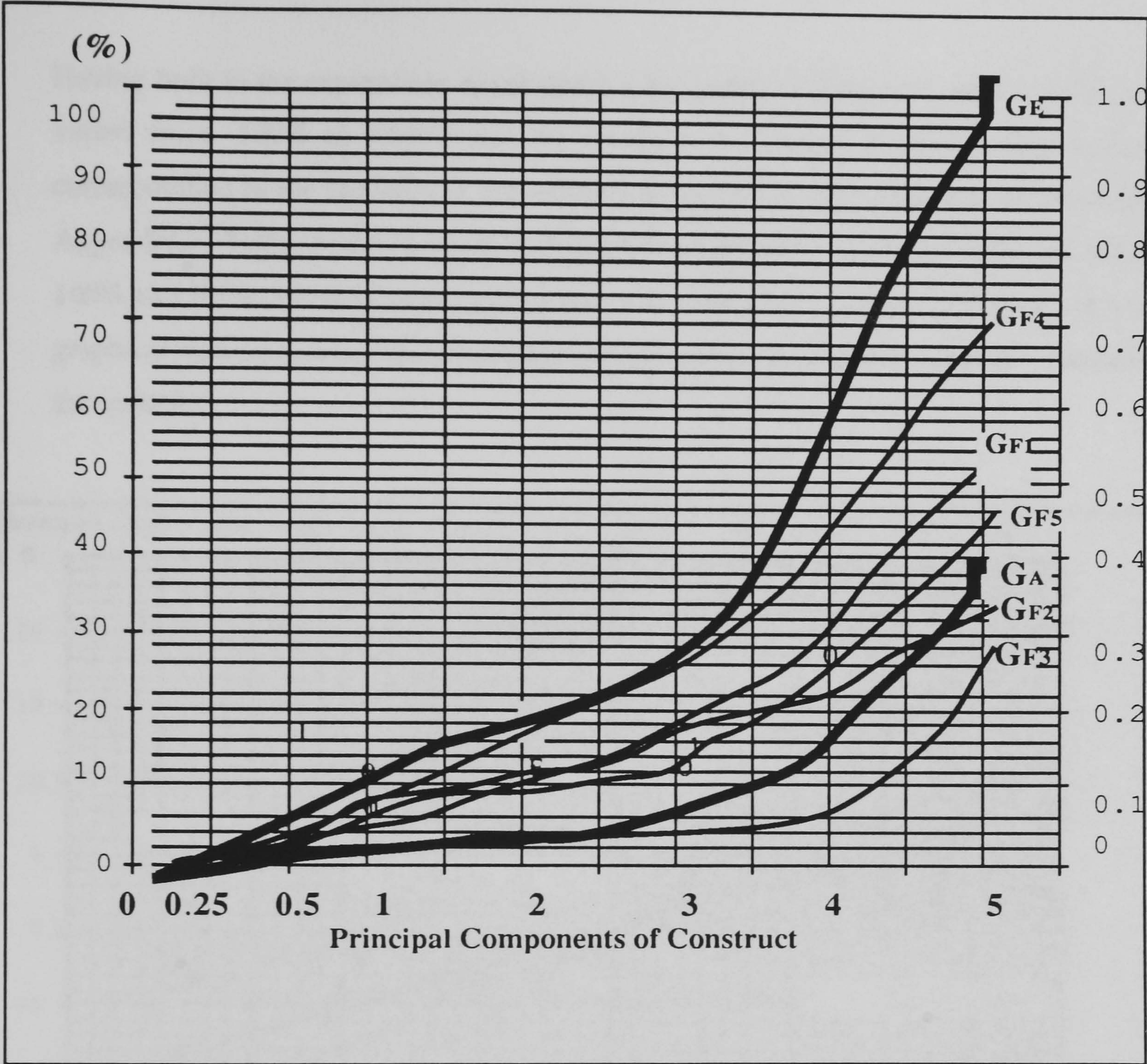


Figure 9.2. Grading functions for the Worked Examples

9.2.3. Sensitivity Testing of the Model

In order to investigate the response of performance grading function (G) to variations in the principal elements, a sensitivity analysis was conducted using the MICROSOFT EXCEL spreadsheet. First the model was built into a spreadsheet format. The content of the spreadsheet is determined by what flows into it from any of the five components of the model construct. The expression of the performance grading function was given in Chapter 8 as:

$$G_j = \sum I_{ji}$$

where, G_j ranges from 0 to 100, i.e., $0 \leq G_j \leq 100$.

Having built in the expressions developed for the model in Chapter 8, each variable was varied from -100% to +100% and the resultant % changes in the grading function corresponding to the variation of the individual variable at each stage was recorded (See Appendix F: Tables F2&F3). Each Variable was subjected to incremental changes from -100% to +100% and the corresponding output is shown for each variable. Figure 9.2 is a graphical representation of the percentage changes in grading function against variations in the variables.

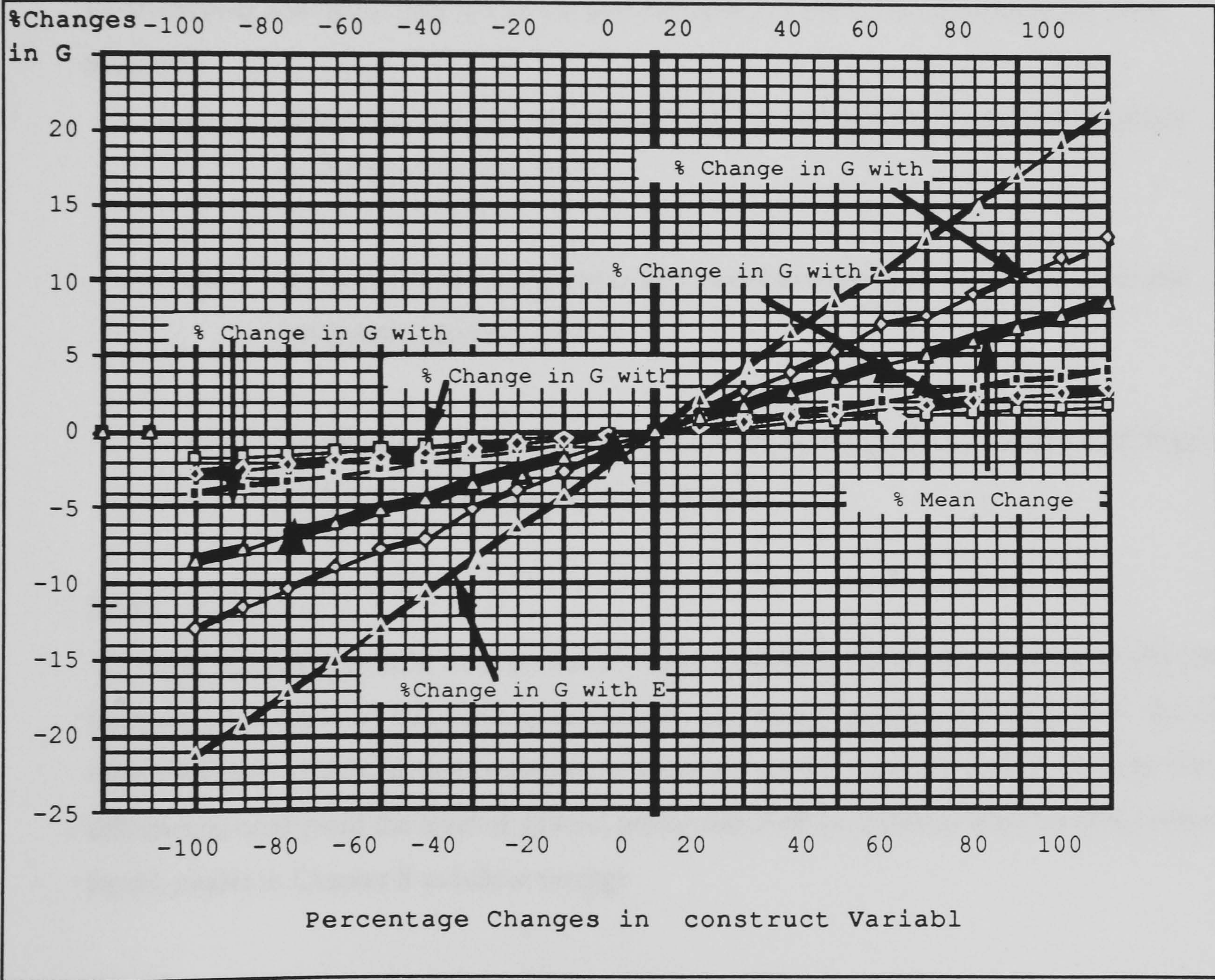


Figure 9.3 Percentage changes in Grading Function

From these results, the most influential of all the variables on the grading function is corporate value and the least influential of them is skill and management style. Probably because it has been proven that management style is influence by corporate ethical values

and organisational culture. These changes are plotted on Figure 9.3

9.3.0. Summary

The primary objective of developing this model in Chapter 8 was to provide the construction firms with a system with which to evaluate their marketing practices, to provide a means of comparison of the firms marketing position with those of other competitors and to determine the firms marketing position relative to the industry.

In developing a methodology for validation this model , three different approaches were adopted:

- (i) to test the characteristic average grading function for the industry as given by the model in Chapter 8;
- (ii) to demonstrate how to apply this model to a group of individual firms and the interpretation of results;
- (iii) sensitivity analysis to to study the responses of grading function to changes in the variables of the model construct.

Step I

To verify the characteristic average performance grading function (G) for the industry, an independent sample of 100 firms as described. An average grading function from the 30 responses was 45.71% which is about 6% above the model value of 39.8%. The test with this sample confirmed the level of general performance of the industry which was described by the model in Chapter 8 as below average

Step II

A worked example on five individual firm was carried out to demonstrate the procedure for model implementation for the purpose for which the model was developed. First, to compared the marketing positions of each of the firms with average of the industry and also with one another and thereby suggesting management courses for action for improvement where necessary.

Step III

The third exercise was conducted to study the response of the grading function to any change in any of the principal components of the model. The result show that the grading function is most sensitive to change in corporate value and least sensitive to management skill.

The three steps demonstrated above have shown that this model can , with a high degree of accuracy not only to show the marketing position of a firm but also detect any managerial and resource deficiencies concerning marketing practices within the firm. The validation exercise has again demonstrated the lack of competence regarding the organisation and the management of the marketing function in the UK construction industry. Furthermore the results of this exercise shows a general lack of commitment on the part of senior managements in the industry to marketing function.

Chapter X
Case Studies and Interviews

Chapter Ten

Case Studies and Interviews

10.1.0. Introduction

In developing the methodology for this research (Chapter 6), part of the steps taken to provide psychological explanation to many issues that might arise during the course of the industry - wide survey was to conduct interviews and case studies. One major problem encounter was that of availability of people willing to make up time for these interviews. Secondly there was problem of proximity in respect of person to person interview. It was also considered very expensive to conduct these interviews on the telephone. Hence a face to face interviews were considered and in some cases a structured questionnaire was considered most appropriate (see Appendix A2). In all, seven organisations of various sizes and geographical locations were interviewed. These include five contractors and two design firms. The specific issues which the interview sought to address include: marketing objectives; marketing strategy; clients' loyalty; and the future of marketing in construction firms.

(i) Marketing Objectives

Part of the interview was aimed at establishing whether or not these firms are precise in the definition and description of their marketing objectives and how closely related the objectives are with the overall organisational mission statements or corporate objectives.

(ii) Marketing Strategy

In terms of marketing strategy the interview was focussed upon how marketing policies are formulated and the strategies adopted in pursuing these policies including planning, implementation, control and evaluation of these strategies.

(iii) Clients' Loyalty

This aspect of marketing objectives as described in Chapters 2 and 7 was brought up for discussion during the interview because of the importance attached to it by the respondents as the report on the main survey indicated in Chapter 7 (section 7.6.1). The interview sought to know specific effort or strategies adopted by the firms aimed at achieving these

objectives.

(iv) Future of Marketing

On the future of marketing, the interview centred on the interviewees perception of the future role of marketing in their individual organisations, i.e., whether or not they see marketing playing a centre or supportive role in the firms competitive and future business strategies. The details of questions and the discussions format are presented in Appendix A.

10.2.0. Contractors Cases

Five contractor organisations of different characteristics measured in terms of turnover, number of staff, geographical spread and type of works were interviewed:

- (i) a large international civil/building contracting company;
- (ii) a large national civil/building contractor;
- (iii) a medium size national civil/building contractor;
- (iv) a medium size regional civil/building contractor;
- (v) a small regional contractor.

10.2.1. Contractor A: A Large International Contractor

Company A is a large national and international contractor with a gross annual turnover of about £1000m . It has offices throughout the United Kingdom and employs over 1000 staff. The company has been in operation in the UK for over 130 years. The activities of this company includes civil engineering works, commercial and industrial building, property development. The company also has expertise in tunnelling, gas and oil industries projects both in the UK and around the world (see Figure 10.1). But despite the age and experience of this company, its marketing department had only been established some 14 years ago. The marketing department is headed by business development manager, who in particular has been in charge of the company's marketing activities for the past 12 years.

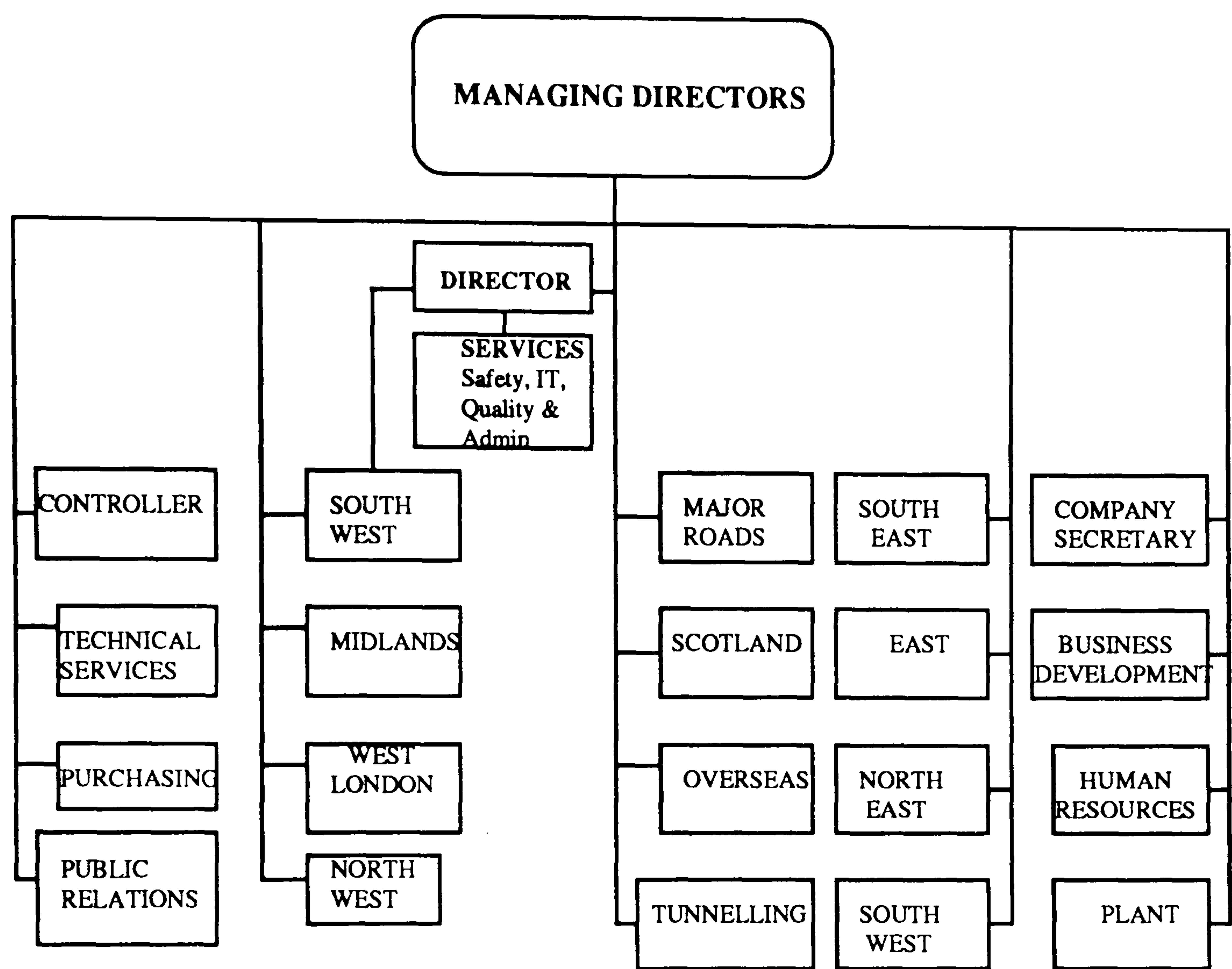


FIGURE 10.1 Reporting Structure of Company A

Surprisingly the business development unit of the company which is charged with marketing responsibilities is separated from the public relations department. One of the major problems according to the respondent is that of duplication of efforts by both departments.

10.2.1.1. Description of Marketing Objectives

The main objective of the company’s marketing programmes according to the business development manager is to identify and satisfy customers requirements profitably. This according to him is carried out by securing sufficient potentially profitable, enable enquiries to sustain their turnover objectives. For example they have a target of enquiries to award ratio of 1:6

10.2.1.2. Marketing Strategies

The sectors of the company's market that are potentially most rewarding are explored by visiting, , advertising, brochures, and technical journals to maximise enquiries to yield support to overall divisional objectives. The staff of the other departments within the company play some key role at enhancing the success of the company's marketing programmes. Regional managers are consulted at any stage to accompany marketing managers on important assignments as well as specialist staff. Comprehensive meetings are held quarterly at senior and subordinate levels. There is a constant flow of information from staff across to management and the workforce spectrum.

10.2.1.3. Marketing planning

This company operates a 2 year marketing plan which is updated every second year. Alongside the 2 year plan the company operates a more detail annual marketing plan. This short term approach is blamed on market situation. In its own case 40% of the company's workload traditionally comes from road section of of the industry. The government road programmes are subject to many procedures and at the same time policies change annually. The private industrial/commercial sectors are also unstable and situations change according to confidence. Hence the firm views it unrealistic to have a long-term marketing plan.

10.2.1.4 Clients loyalty

This company attaches great importance to its ability to maintain the loyalty of its existing clients. As a way of meeting this objective, the company has established a comprehensive data base on clients' changing circumstances and interests. It has kept a constant monitor on the activities of these clients in order to keep in time with every stage of the development in the clients circumstances.

To facilitate this a close contact is maintained with all the important clients through visiting, invitation to projects of interests, and social meetings. Similar means are also used to keep in touch with consultants in addition to which close links are formed through design and construct relations. As a way of ensuring that the client is comfortable at considering the firm for future engagement the company, as a matter of priority, strives at making sure that the clients are satisfied with existing services. Regular meetings are held during the course

of the existing project as a way of working in partnership with the clients and with all other parties involved in the project.

To enhance its competitive advantage the marketing department plays an important role in stressing the importance of safety, quality assurance, the environment, and investing in community where it operates. The company also works at continuous improvements in managing, technical development and commercial techniques to keep the company as a modern and efficient organisation. More specifically, the company continually draws the attention of its important clients to its continuity through its:

- (i) track records;
- (ii) strong balance sheet;
- (iii) competitiveness;
- (iv) capability and capacity to deliver prompt quality services
- (v) user friendliness.

The company holds quarterly meetings with its existing clients as a way of getting feedback on each operating area of the company. To ensure recommendation in the future the marketing department always communicates the company's ability to:

- (i) complete on time;
- (ii) provide quality product;
- (iii) manage well;
- (iv) ensure safety for all;
- (v) co-operate;
- (vi) deal accurately with its accounts and do so with reasonable attitude;
- (vii) deal with its maintenance obligations.

10.2.1.5. Evaluation

According to the respondent (Business Development Manager), the number of 'blue chip' contracts is a measure of success. Although he argued that this in many cases does not solely depend on the activities of the marketing function. He said the company's marketable

qualities are the main influence, i.e., its track records. On self assessment of the company's marketing programmes, the respondent feels generally that the company has been able to meet most of its marketing objectives and appears to do better than many of its competitors. With regards to other competitors, the company ensures that its staff are aware of any competitor reaching the company's capacity or, similarly, being short of work.

10.2.1.6. Future of Marketing and the Company

Marketing function in this company is separated at broad level as in many industries and in a number of civil engineering contracting companies. At present there is very little room for further integration of marketing with other functions in the company. The respondent is, however, of the view that even though any function away from existing site operations tends to be marked down, somewhat, there is a growing excitement about marketing in the company.

As for the future role of marketing in the company, the respondent thinks that there is the probability that the role of marketing may change quite dramatically in future in order to adjust to clients, new procurement strategies such as partnering, design and construct, management contracting and new forms of contracts. He insisted that the role of marketing is central to the organisation, if not now in the nearest future, because marketing is the only management function exclusively devoted to assessing and anticipating the future. The forecasting of trends and servicing of opportunities to chosen new directions, he argued, are fundamental to the achievement of overall corporate objectives.

10.2.2. Contractor B: A Large National Contractor

This company is a large national contracting company with a gross annual turn over approaching £500m with number of employees approaching 1000. The company was established in 1908 (87 yrs). It has a marketing department which was established in 1984 and is headed by a group marketing director. The incumbent group marketing director has been responsible for marketing programmes for the past 9 years. The structure chart of the company is as shown on Figure 10.2 below.

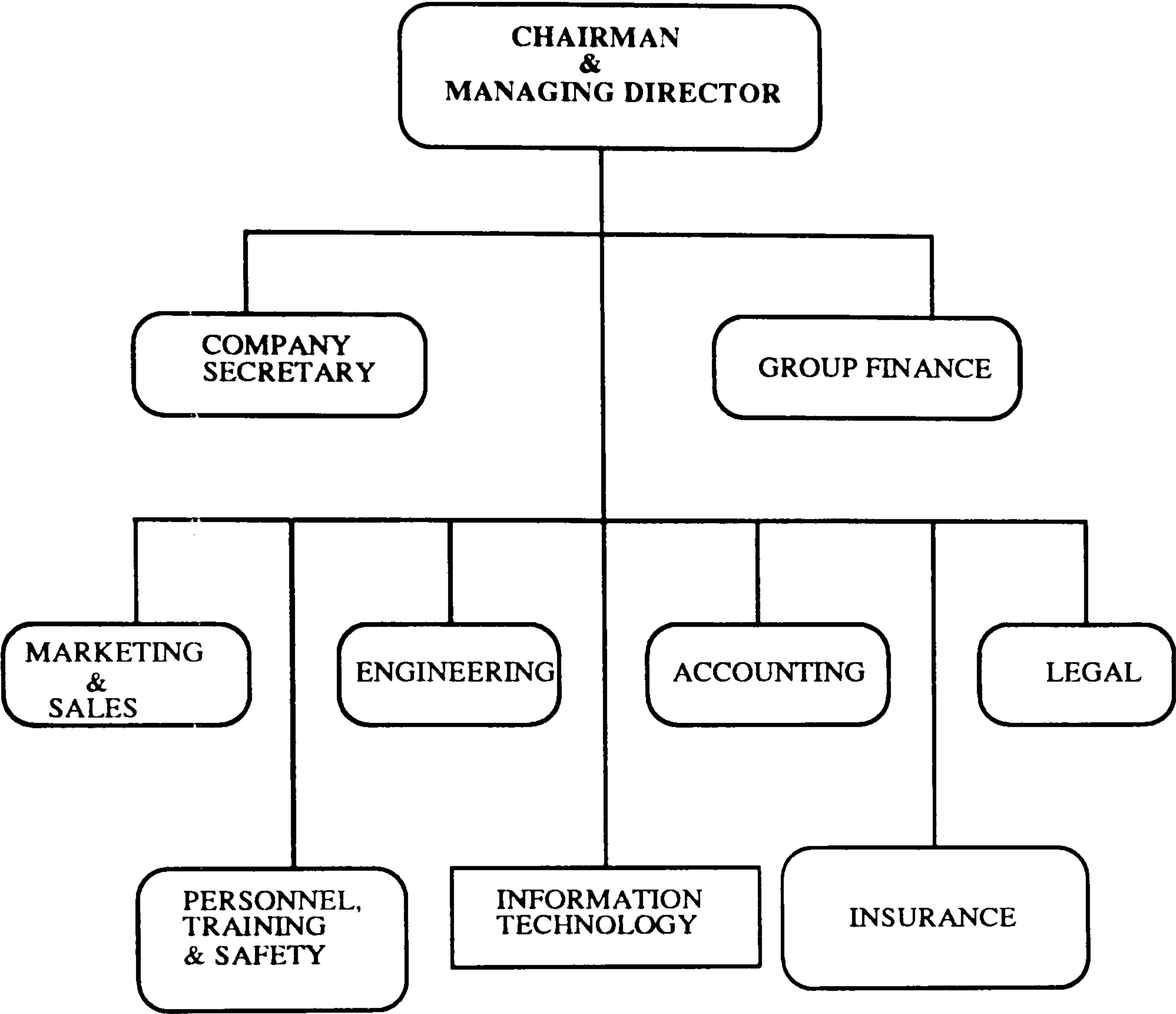


Figure 10.2 Structure Chart of Contractor B

10.2.2.1 Marketing Objectives

The main objective of the company’s marketing programmes is to obtain workload of acceptable type in the area the company wishes to operates with clients of good quality of, profit and positive cash flow.

10.2.2.2. Marketing Strategies

The parameters to target are agreed upon by the board of the company and this information is then passed to the sales team. The activities are monitored and updated fortnightly. A dedicated marketing team supports the operating units and subsidiaries from the head office by visits, and cooperative events. A group budget is agreed with individual units regarding cost arising from them. The company has its own in-house design team and makes use of Information Technology (IT) heavily.

On the role of non-marketing staff of the company, the marketing department organises events for the operating units of the company and involves directors and senior managers in this way.

10.2.2.3 Marketing Planning

The company sees the instability in the economy and sudden “mood” tuning of the market as the main reason for lack of marketing planning in the construction industry. The short-term approach to strategic formulation in general within the industry is attributed to these uncertainties. Hence the company’s marketing plans are usually for 2 year periods.

10.2.2.4. Clients Loyalty

The primary function of the marketing department is to ensure continual loyalty of its clients through good contact. Hence the marketing department targets men and women within the company who are “most likely” to maintain close contact with client’s person both at a formal and informal level during and after each contract. Through regular phone calls, invitations to events, site meetings and good performance records the company works at ensuring future engagement with existing clients.

In order to improve on its competitive advantage within a particular market segment, the company constantly works at developing “new initiatives” especially in the areas of reducing cost, improving its image, changing peoples perception of the company’s image particularly, with regards to:

- (i) completion of existing project on time;
- (ii) quality;
- (iii) value for money;
- (iv) keeping communication lines open; and
- (v) adopting non-adversarial attitude.

10.2.2.5. Evaluation

The successes and failures of this company are evaluated in terms of: (i) workload; (ii) quality of engineering; (iii) budget achievement; and (iv) feel good factors of both the clients

and the company.

On the overall assessment of marketing activities the group marketing director was of the view that the marketing department is under resourced, no back-up from colleagues, under valued, taken for granted and as he puts it, “ at home all the the time to those other people - butterflies”, i.e., to non- marketing staff, they are parasites.

The company employs an informal feedback from the clients during and after each contract and in addition it assesses itself by informal research into activities of other competitors by monitoring pricing leads, professionals and clients operations, reading the press, and high level cross company contact.

10.2.2.6. Future of Marketing and the Company

Commenting on the present attitude of the industry in general to marketing, the respondent sees lack of funding and complacency on the part of senior managers within the industry as being responsible for any shortcomings. He suggested the need for more acceptance of marketing at high level of the company. The respondent thinks the role of marketing will change in the nearest future because of increasing realisation of its importance both in-house and outside the company. At present marketing team plays supportive role as part of a bigger team.

10.2.3. Contractor C: Medium Size National Contractor

The third contractor is a medium sized national building/civil contracting company established in 1934 (61 years). The company's gross annual turnover is about £50m and it employs about 400 staff. It is not known when the marketing department was established. The marketing department is headed by a marketing executive. He took over the responsibility of management of marketing programmes in 1992. The organisational structure is represented by Figure 10.3 below.

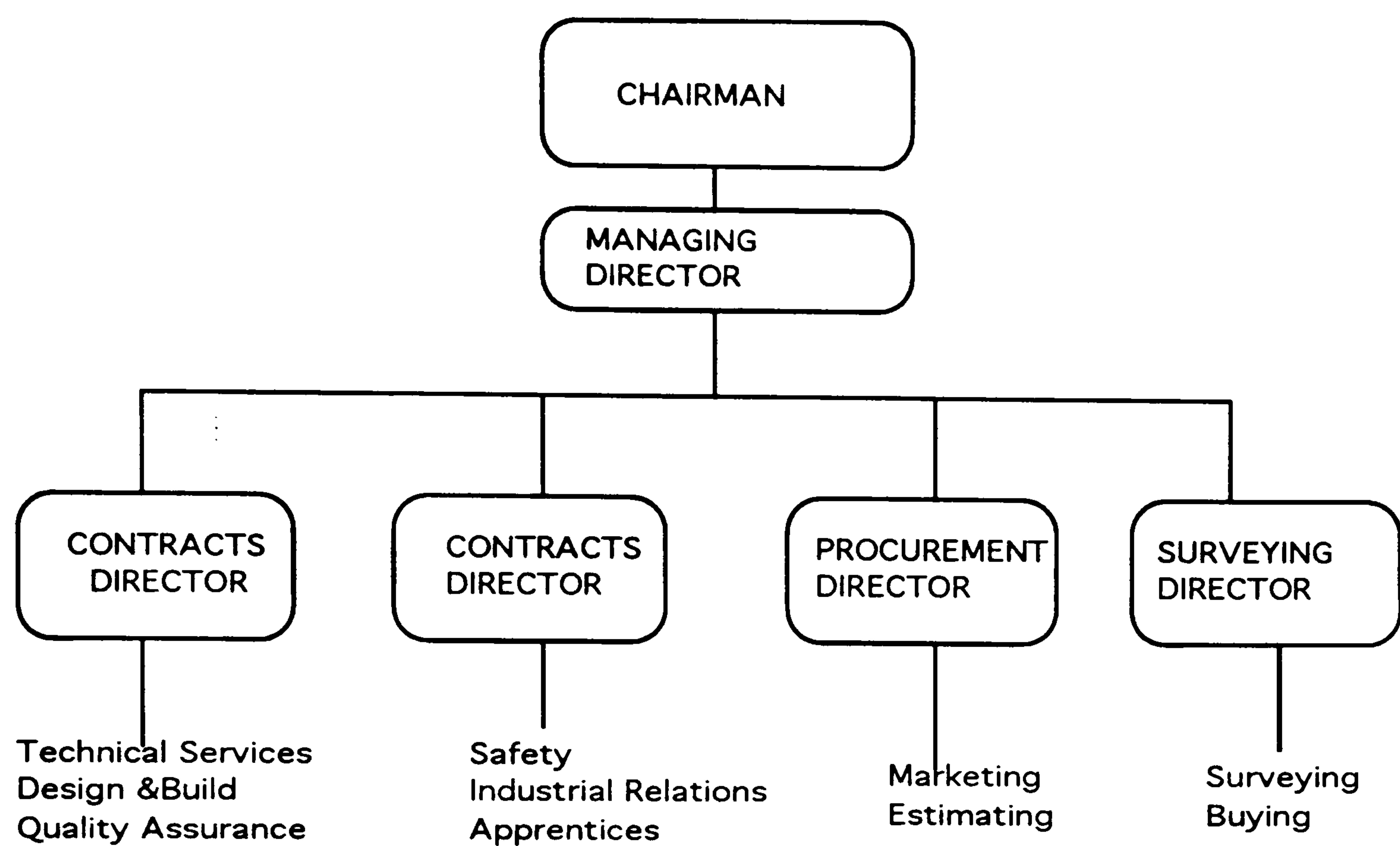


Figure 10.3. Structural Chart of Contractor C

10.2.3.1. Marketing Objectives

The company has three main marketing objectives:

- (i) to maintain close contact with its regular customers, i.e., clients and professional practices with whom it regularly work;
- (ii) to seek suitable opportunities for negotiated work via early involvement in the developments; and
- (iii) to ensure that the company’s name is linked with the type of work it wants to undertake.

10.2.3.2. Marketing Strategy

The company is a subsidiary of a larger company from which the corporate marketing strategies are initiated. Individual operating companies like this company have their own marketing departments where these strategies are translated into annual marketing plans. This company has one marketing executive and a marketing assistant. These two liaise with the directors of other departments. These directors are expected to make regular contact with a number of existing clients and all the company staff are made aware of the marketing

plans. To finance marketing programmes a marketing budget has been formulated for all related activities. And IT equipments which include a computer linked with the parent company data base with facilities to produce all submission documents in-house. Furthermore, all non-marketing staff receive a copy of the marketing plan and an annual marketing meeting is held with senior staff. The parent company has recently initiated a programme to inform all staff of the importance of marketing.

10.2.3.3. Marketing planning

The planning of the marketing programmes is carried out jointly by the managing director, procurement director and the marketing executive based on previous historical data. Traditionally the company's works are short-term in nature. Only projects of 12 - 15 months maximum duration are considered with most of them much shorter in duration. Forecast data from various sources such as government, universities, and institutions, he explained, vary in workload definition over longer periods of time. This, the marketing executive added, makes long-term forecast and planning very onerous. Market conditions are strongly believed to be uncertain. Being a medium size company therefore, they are able to change direction more easily to focus on the current industry's output. Hence, marketing planning in this company, according to the respondent, is done on a short-term bases and is always under constant review.

10.2.3.4. Clients Loyalty

To ensure existing clients loyalty, the respondent said his department has drawn up a list of 60-70 customers with whom the company works regularly. Each director, together with some senior staff, is allocated a number of these clients as "dedicated" contacts with whom they maintain regular contacts both in and outside of work. The company also maintain its regular entertainment days for activities such as golf, racing and other social meetings.

Through these continual contacts the company is able to find out about projects at an early stage and thereby express interest before information is generally released. Being part of a major parent company, that provides services that many of its immediate competitors either cannot provide or change to provide, the company finds it a lot easier to strengthen and increase its capability and competitive advantage to continue to service its clients.

By assessing continuity of work the company has been able to offer discount that would not be available in single projects. The company does a good number of project for a major retail client and has staff dedicated solely to that client. The strategy has made that client very much disposed to use the services of the company whenever and where ever the need arises. A feed back strategy is also employed by interviewing each client and professional practice after project completion to assess its performance during all stages from tendering to construction. Although the company does not research into the activities of other competitors, it keeps a file on computer as to organisation it tendered against if known.

10.2.3.5. Evaluation

The respondent was of the view that it is difficult to assess the effectiveness of marketing. However, he did say that the company does keep detail data of its performance at the time of tender and during construction which enables the company to focus on those activities that it is good at. With constraints determined by the parent company, he expressed satisfaction with the performance of the marketing department.

10.2.3.6. Future of Marketing and the Company

Concerning the future of marketing in the company, the respondent said that there is a need for change in perception of marketing in the company. He sees the need for more awareness that marketing is a mainstream function and not just “easy lunch”. According to him, marketing plays a central role in creating awareness of the type of work the company wants to be associated with. He, however, did not foresee any serious change in the role of marketing in his company in the immediate future.

10.2.4. Contractor D: A Medium Size Regional Contractor

This company is medium size regional building/civil contracting company with a gross annual turnover of about £50m and employs about 300 workforce. It is a regional company and operates from a number of offices with its main office based in Liverpool. The company has 81 years of history. The marketing department is seven years old and is headed by a marketing manager. The incumbent marketing manager has been in charge of the company’s marketing programmes for the past 5 years.

10.2.4.1. Marketing objectives

This company has two main marketing objectives:

- (i) to maintain turnover requirements;
- (ii) to promote the company's image through short-term and long-term marketing.

The company's marketing strategies are formulated in line with these objectives. For instance, a monthly target is set for turnover. Secondly, tendering success is taken into account as "Win" and "Do" on annually basis.

10.2.4.2. Marketing planning

On general planning attitude, the respondent defended the short-term approach adopted by his company by saying that his company only need to maintain their level of turnover, or more importantly, its profit margin and argued that long-term jobs are best avoided in case the market activities improve, or there are rise in material prices. He is strongly of the view that the market is really beyond the company's control. Hence as a matter of policy the company does not engage in long-term rigid planning but follows cautiously the market trends.

10.2.4.3. Client Loyalty

A major objective of construction marketing as observed from the main survey (Chapter 7) is that of maintaining the loyalty of existing clients. Regarding strategies employed at achieving this objective, the respondent said that the company first and foremost emphasises good practice. The company also believes in talking to clients instead of writing. For instance, if there was a problem during construction, that might cause the client some embarrassment, the company warns the client of the situation by talking directly to them before putting it in writing.

After sales services is taken seriously. For example, the company ensures that any defects after construction are quickly attended to. More importantly, if a close relationship has been

developed, for instance, a by contract manager or job quantity surveyor, they are encouraged to keep and maintain such contacts even after the completion of the contract. through regular phone call, follow-up visits as and when request and intimating the clients with firms progress on other projects.

To strengthen its competitive advantage, the company emphasises good management of contracts by paying attention to details and trying as much as possible to avoid confrontation and putting effort into finishing the job instead of claims. This is further strengthened by the willingness of the company to adopt a partnership approach in executing existing contract both with the clients and the design team.

In anticipation of future recommendation and references from existing clients the company has adopted a policy of keeping a track record of good working relationship with its clients, ensuring that it works within its capabilities and level of competence, i.e., taken on only those jobs that the company is sure it has the capacity and the know-how to handle.

10.2.4.4. Evaluation

The successes and failures of marketing programmes in this company are evaluated in terms of:

- (i) tenders received;
- (ii) tenders from new clients;
- (iii) maintenance of existing contacts;
- (iv) success with key projects, e.g., “on your door step” jobs - Why were we not on the list?.

At present level the marketing manager feels the marketing unit has performed satisfactorily based on good staff reports, self assessment and new contracts won each year. The manager, however, laments the fact that the company does not operate any feedback strategy on its marketing programmes and admits that it may be worthwhile having a formal procedures for obtaining feedback from its key clients.

10.2.4.5. Future of Marketing Within the Company

At the present, there is a divergence of opinion concerning the role of marketing in the company. While the marketing staff see marketing as central to overall corporate objectives, the rest of the company sees it as supportive and tend to believe that tenders will continue to turn up as in the past. Although he did not see the role of marketing within the company changing in the immediate future, he said the marketing department is working at ensuring greater involvement of senior members and willingness to put what has been discussed into action.

10.2.5. Contractor E. Small Regional Contracting Company

Contractor E is a small size regional building/civil engineering company with an annual turnover approaching £20m and employs up to 200 workforce. The company has been in operation since 1930. The marketing unit headed by a business development manager is 7 years old. The management structure of the company is represented by Figure 10.4 below.

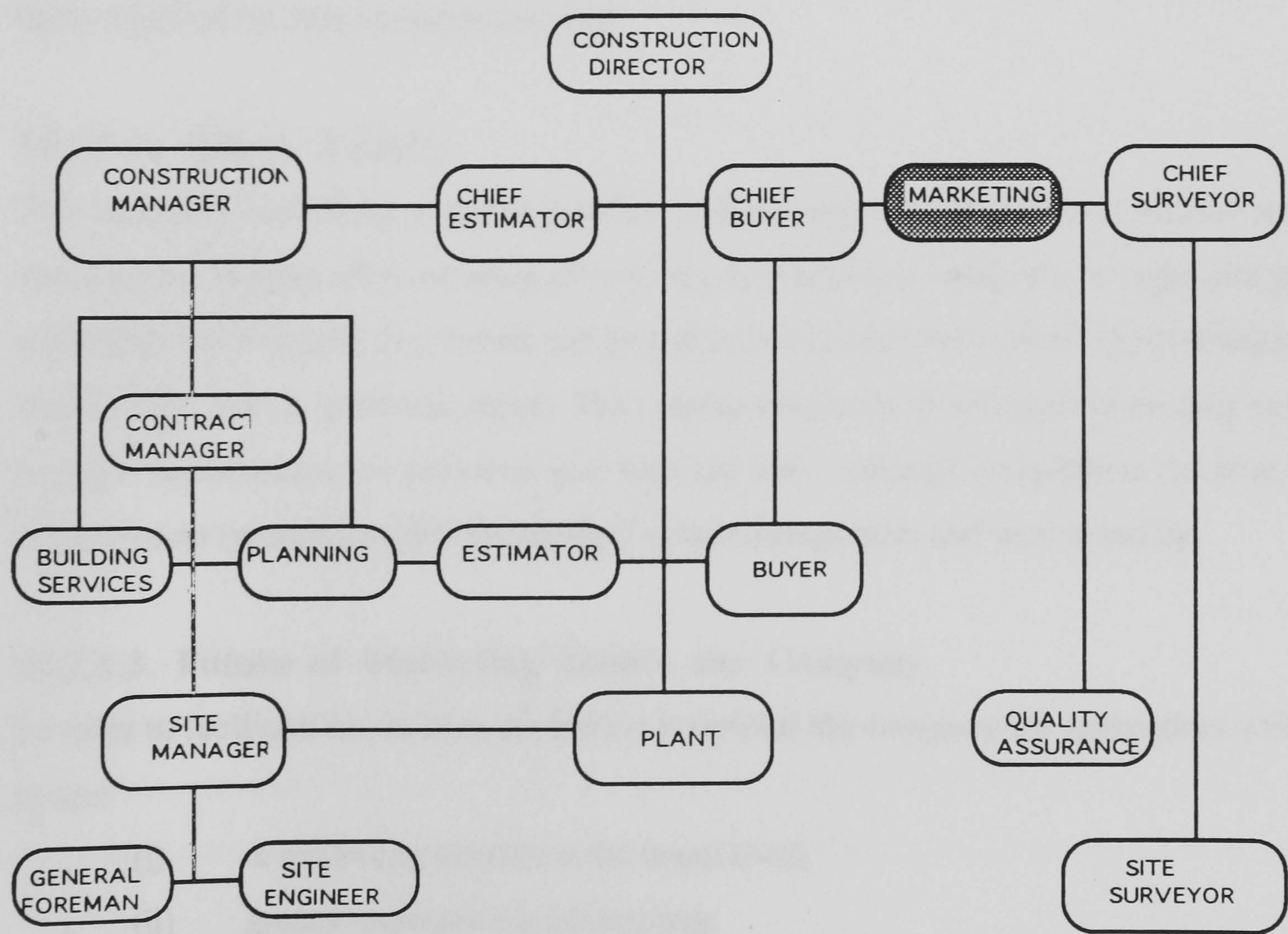


Figure 10.4. Management Structure of Contractor E

10.2.5.1. Marketing Objectives

The company does not have formal marketing programmes. The business development manager sets up his own objectives which are to:

- (i) maintain and increase client contacts;
- (ii) maintain an acceptable level of enquiries;
- (iii) explore new markets;
- (iv) maintain and project the good image of the company.

The company has no formal marketing strategy nor structure provisions for implementing marketing programmes within the organisation. Furthermore, there is no particular strategy for involving non marketing staff but the marketing staff appreciate useful information and leads supplied by most construction staff.

10.2.5.2. Client Loyalty

This company, according to the respondent, considers personal contact as its best way of ensuring the loyalty of its existing clients. Being a regional company, it organises group gatherings such as golf days where existing clients can meet with other other management members as well as potential clients. The company believes its strongest marketing weapon is good performance on previous and existing jobs, through completion on time, cost effectiveness (working within the budget), good management and workmanship.

10.2.5.3. Future of Marketing Within the Company

In order to facilitate future changes for the benefit of the company the respondent will like to see:

- (i) a marketing director at the board level;
- (ii) greater exposure via advertising;
- (iii) marketing included in the overall strategic formulation and planning of the company.

He attributes the low profile of marketing in the construction industry to the industry's strong reliance on repeat business either by client or type of work. He was of the view that in the near future the role of marketing will become more central to the organisation because, according to him, the company is growing by acquisitions and it is essential that the market place is aware of its growing capabilities.

10.3.0. Cases From Design Firms

Two design firms, one a medium size multi-disciplinary design practice and the other a small architectural practice were studied in so far as they have managed to adopt to their market environment. Their marketing objectives and the strategies employed towards achievements of these objectives were examined. The present role of marketing within the firm and their view on the future of marketing were also examined. Finally the marketing activities carried out to ensure continuity with and loyalty of existing clients were also investigated.

10.3.1. Design Firm A: A Multi-disciplinary Design Practice

This firm is a medium size multi-disciplinary design practice with 30 years of history in the UK. It has an annual turn over of about £60m and employs about 250 work force. The firm is engaged in civil/structural and mechanical/electrical engineering design and consultancy services. The firm does not have a marketing department. The marketing function of the firm is managed by one of the partners as an additional responsibility. The organisational structure of the firm is present in Figure 10.5.

10.3.1.1. Marketing Objectives

The primary marketing objective of this firm according to the partner responsible for marketing function is to make and maintain contact with public procurement authorities, private clients and property developers to secure appointments for confirmation projects.

10.3.1.2. Marketing Planning

The policy makers in this firm believe the construction industry cannot plan ahead, because according to the respondent, the organisation believes that forward planning is dictated by

the client and developers, particularly the government. The respondent gave an example of how frequently the government changes face of spending on schools, hospitals, housing, and roads development programmes. Hence marketing planning in this firm is informal, flexible and on annual basis.

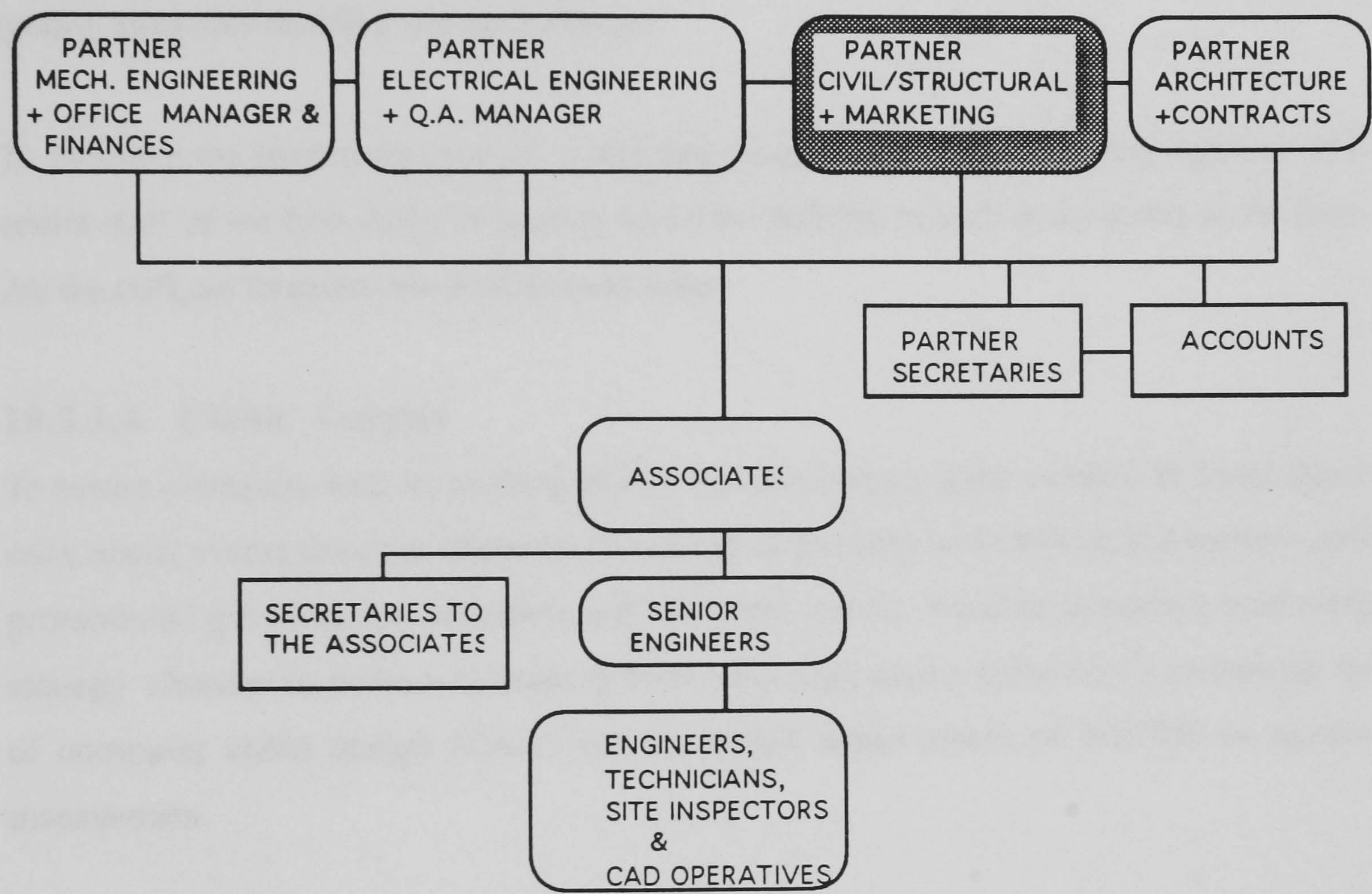


Figure 10.5. Management Structure of Design Firm A

10.3.1.3. Marketing Strategies

Despite the absence of structured marketing organisation within the firm, the respondent gave a strong assurance that marketing is well understood in the firm as a very important management function. As a result, the firm has adopted the following marketing strategies:

- (i) formal and informal regular contact existing or potential clients;
- (ii) selective advertising in journals, magazines and newspapers;
- (iii) publications and practice brochure;
- (iv) corporate identity programmes: practice signposts are always on display on

construction sites.

The brochures are updated regularly as a way of acquainting the client with up to date activities of the firm and as a way of enhancing the selling of the firm's capabilities. The use of letter headed with company's logo and BS5750 chartered mark giving the firm quality assurance standing and accreditation.

To facilitate the implementation of marketing programmes all the partners together with senior staff of the firm assist in passing down the policies to staff at all levels of the firm. All the staff are therefore involved in marketing.

10.3.1.4. Client Loyalty

To ensure continuity with its existing clients the firm keeps regular contacts through phone calls, social events (lunches, dinners), attendance at seminars and professional lectures, and promotional gifts (diaries, calenders and Christmas cards). Another important marketing strategy aimed at its client is by making them constantly aware of the firm's increasing use of computer aided design (CAD) and its recent achievement of BS5750 in quality management.

10.3.1.5. Future of Marketing Within the Firm

At present the training and the staff development policy of the firm does not include marketing or management in general. Hence marketing and other management skills are learned very slowly through experience. The respondent said the firm is of setting out staff training courses in marketing and management in general.

The role of marketing, as understood within the firm at the moment, is a supportive one because considerable amount of the firm's work is through recommendation of satisfied customers. The respondent does not anticipate setting up of a marketing department in the near future because the management considers the cost of setting up a dedicated department as too high on the overhead. However, he agrees that with current trends in the industry viz, fluctuation in workloads, increasing clients preference for new procurement methods, and growing awareness of relationship between marketing and business growth (See also

Chapter 5), the role of marketing will continue to shift from being merely supportive to a more central role in the strategic formulation of the firm.

10.3.2. Design Firm B: Small Size Regional Design Practice

Firm B is a small regional design practice with an annual turnover of and employs people. The firm was established 29 years ago. It is headed by a senior partner who, according to him, is in charge of everything. All marketing related activities are coordinated by this senior partner. The management structure of the firm is given by Figure 10.6

10.3.2.1. Marketing Objectives

The primary objectives for the firm's marketing programmes are to develop new clients and maintain existing ones with a view to increasing workload. Because marketing is managed as a secondary function by the firm there is no formal marketing strategy as such, but all the staff of the firm are encouraged to be involved in marketing. The lack of marketing planning was blamed the size of the firm .

10.3.2.2 Marketing Strategy

As a small firm, it lacks the manpower and the skill to engage in formal marketing planning. Secondly, the respondent attributes this informal attitude to the fact the projects and the type of projects are continually changing in context and nature. Hence it is impossible for a firm differentiate itself in terms of services since very project is unique and custom built. According to the respondent, regular contacts and discussions serve as tools for marketing to its existing and potential clients. The contacts are kept on a person to person basis during the course of which greater attention is paid to details. The client is constantly briefed on the day to day of the projects being handle by the firm either through discussion or by updating its brochures. Marketing in this firm is organised on an ad-hoc basis: no plans, no programmes, only personal contact with the clients.

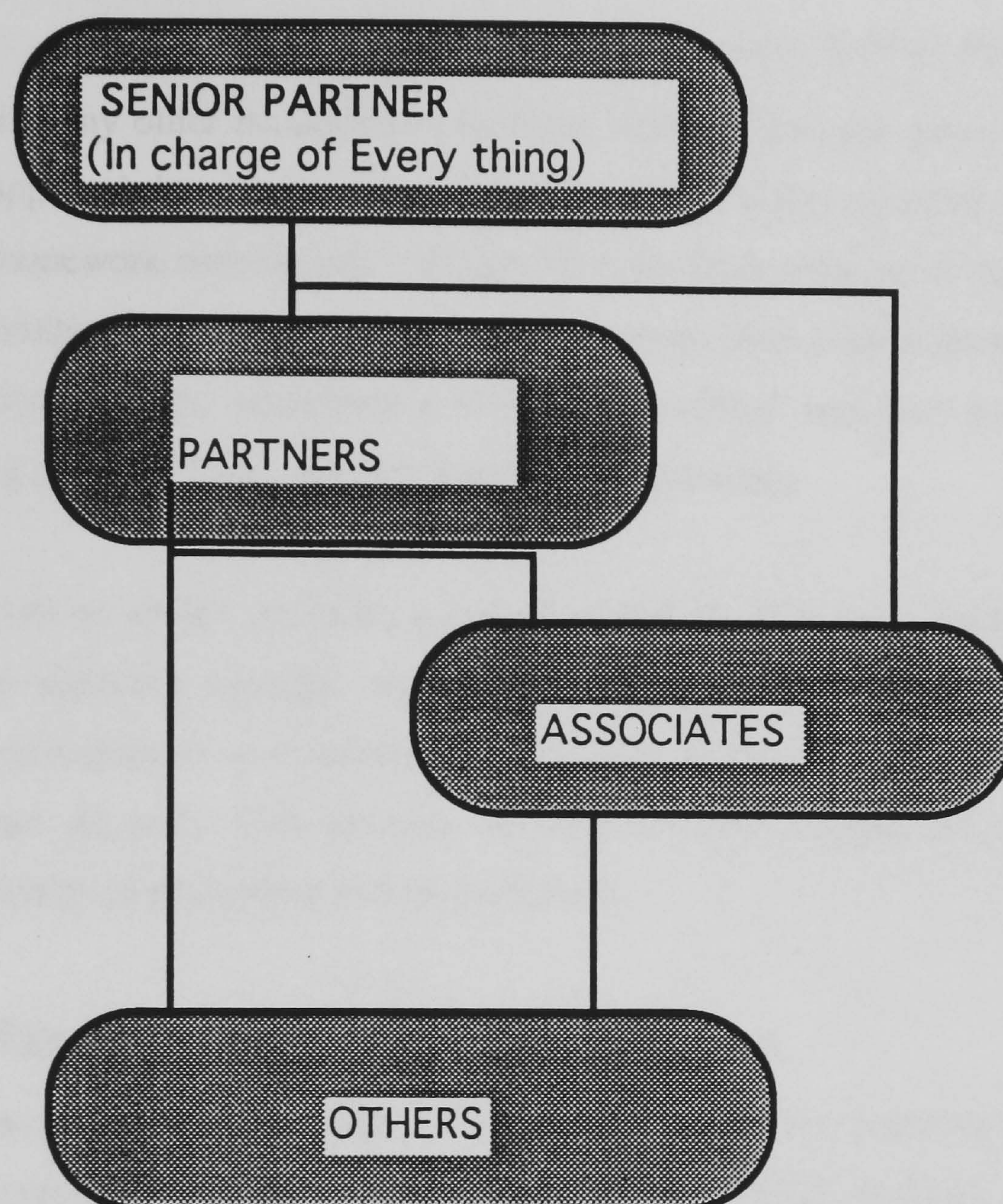


Figure 10.6. Management Structure for Design Firm B

10.4.0. A Framework for Improving Marketing Practice

These results suggest that marketing needs to be clearly and precisely defined within individual organisation. The experience and opinions of independent marketing agents need to be collected and employed with a view to shaping marketing within the industry. There is a general lack of marketing expertise within the industry as a whole. Professional curriculum as taught in universities should include more detailed management skills such as marketing and strategic management. Firms need to incorporate business development programmes such as marketing in their staff development and training schemes. Furthermore, there is need to create systems and procedures that can develop slowly and in sympathy with incremental changes in the environment and ensuring that skills are updated regularly and appropriately.

Marketing like any other management function within a business enterprise requires a systematic approach in order to achieve the objectives of the organisation. This thesis proposes a framework summarised in Figure 10.7, for improving the effectiveness of the marketing function within the construction enterprises. Although it does not guarantee perfect success, it does represent a clear and practical approach for formulating, implementing and evaluating corporate marketing programmes.

The framework as shown provides a logical means of addressing existing marketing problems by applying strategic management process which focuses on integrating marketing management and information systems aspect of a business to achieve organisational success. This process consists of three stages: (1) planning; (2) implementation (plan execution); and (3) evaluation.

10.4.1. Planning and Strategic Formulation

The first process in this framework is the planning stage. The planning stage includes; developing corporate marketing objectives, missions, SWOT analysis(ie, identifying organisation's external opportunities and threats, determining internal strengths and weaknesses), establishing long-term, medium and short- terms objectives, devising policies for implementing selected marketing programmes. The planning process may also include generating alternative strategies and programmes. Identifying an organisation's existing mission and objectives is the logical starting point of marketing management because a firm's present situation and conditions may preclude certain strategies and may even dictate a particular course of action.

Recent changes resulting from increase in competition, recent prolonged recession and developments in global politics and economies are gradually reshaping the role of marketing in the industry. For the construction industry, the objective of the marketing function is no longer limited to getting on to clients tender list but they now include building relationships with clients, penetration into new markets, clients research and attainment of competitiveness.

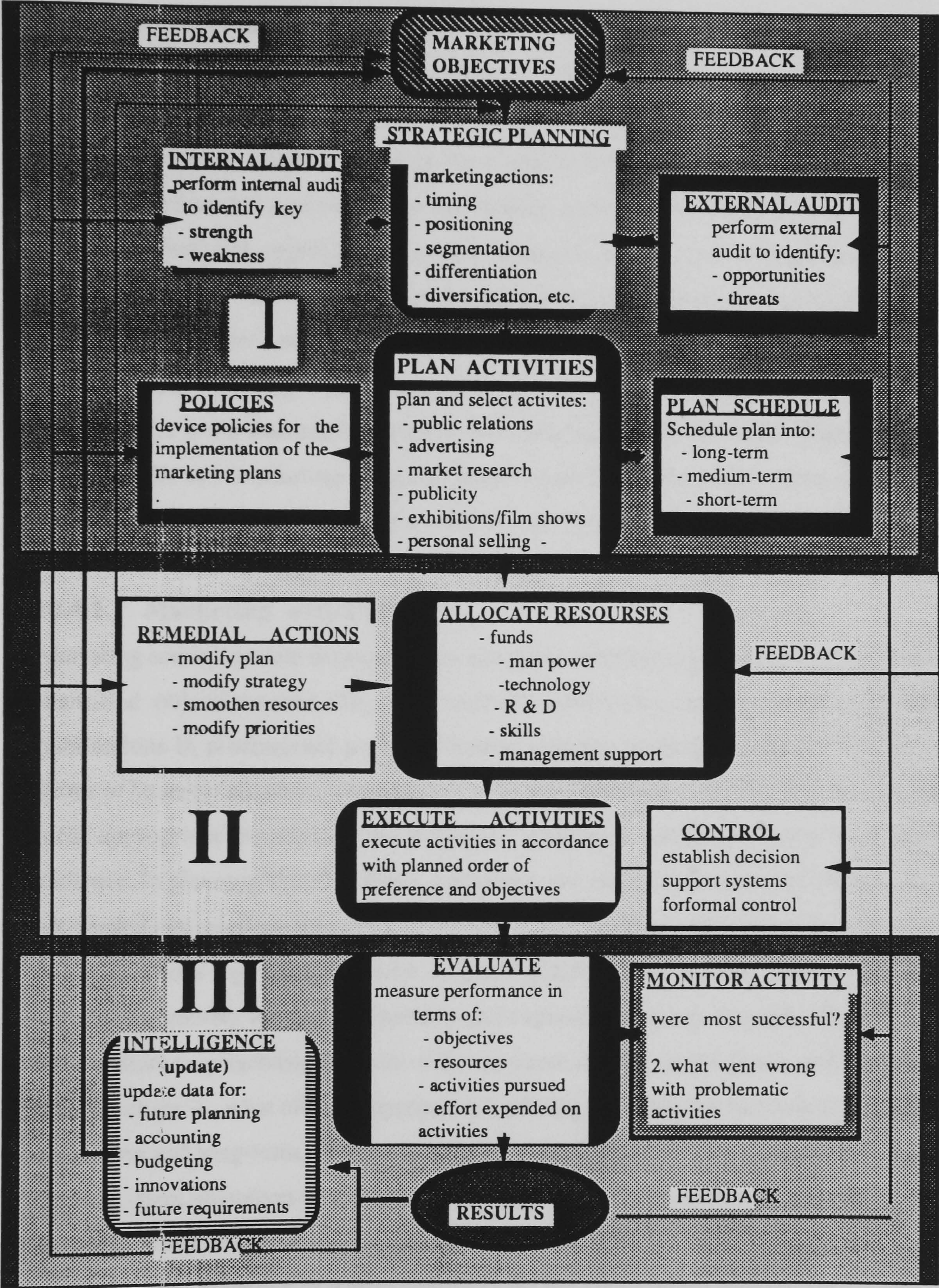


Figure 11.1: Systems Framework for Improving Marketing Practices

The probability of success is influenced by the extent to which the organisation strength, and in particular its distinctive competence, matches the key success requirement for operating effectively in the target market and exceeds those of its competitors. Each business therefore needs to evaluate on a regular bases its strengths and weaknesses. Strengths and weaknesses evaluation can be done by means of checklist on such factors as marketing, financial, organisational, and production. Strategic planning allows the firm to decide whether or not an opportunity is worth taking because at the end of the day what counts for the future is reputation. Application of strategic planning through the analysis of an organisation's strengths and weakness, and matching its capabilities with threats and opportunities in the market place helps to minimise probability of conflict. Firms seeking to make a shift to a marketing oriented culture must formulate a clear view of the firm's mission and the competence the firm wishes to develop in serving the market.

10.4.1.1 Marketing activities

Marketing activities relate to programmes aimed at enhancing organisation's achievement on identified objectives and they may include: advertising; public relations/publicity; publications in professional journals; market research; corporate identity; and different forms of strategic alliances. The decision as to which of these activities is to be considered most appropriate depends on the managers' judgment, skill, the market segment and audience. In planning these activities, a strategic consideration is necessary. What activities are needed and relevant to a particular market or clients. The decision on whether to pursue public relations rigorously in order to get acquainted with a particular set of client or whether to promote the firm's capability and experience through strategic alliance such as joint venture or partnering ventures will very much depend on the firm's understanding of who the client is , what other competitors are offering and what the firm wants to achieve in short-term and long-term. Hence marketing activities must be underpinned by strategy for the long -term objectives of the firm. Along with planning of marketing activities, policies for the implementation of these activities must be developed. Policies are needed to make strategy work. Changes in a firm's strategy do not occur automatically. Policy refers to specific guidelines, methods, procedures, rules, forms, and administrative practices established to support and encourage work towards stated goals. policies provide bases for management control, allow coordination across organisational units. Policies are broad

rules of conduct promulgated by top management to guide marketing operations. e. g, segments to develop, technology, schedules and standards.

10.4.2 Implementation and Control

Marketing process includes developing supportive culture by allocating resources, redirecting efforts, preparing budgets, developing and utilising information systems and motivating individual employee to action. Resources allocation is central to any management activity that allows for strategic implementation. According to David [7], effective resource allocation does not, in itself, guarantee successful strategy implementation because programme, personnel, controls, and commitment must breathe life into the resources provided. Resources in marketing context include: funds, manpower skills, technology, research and development, management support and commitment to marketing objectives.

Successful implementation of marketing programmes hinges upon managers ability to motivate employees and at the same time and upon interpersonal skills. The challenge is to stimulate managers and employees throughout the organisation to work with pride and enthusiasm towards achieving objectives. Marketing programmes should be executed according to the planned order of preference and objectives. Controlling function of management includes all those activities undertaken to ensure that actual operation conforms to planned operation. With effective control system, it is possible to identify immediately, areas that need adjusting as the implementation progresses by taking prompt remedial action when necessary.

10.4.3 Evaluation and Marketing Intelligence

The concept behind marketing performance evaluation framework is that there is an ideal or expected performance index, i.e., a measure at which a firm's performance can be said to be satisfactory. Adequate and timely feedback is the cornerstone of effective evaluation of marketing programmes. The cause of poor performance can be identified more quickly and actions to eliminate the problems can be devised for more effective actions. Faced with constantly changing environment, each construction business unit needs to develop a

marketing information system (MIS) to track trends and developments in the environment. These trends and developments can then be categorised into opportunities and threats, and assessment made of the feasibility and action needed if the organisation is to capitalise upon the opportunities or minimise the impact of threats. These opportunities can be assessed according to their attractiveness and the organisation's probability to succeed in those areas. Good marketing information system is vital for the future of the firm. A good information system is crucial for future planning and development of the firm. Information on results, market trends opportunities and threats helps in reshaping the direction of an organisation.

10.5.0 Summary

The seven cases discussed in this chapter collaborate the findings of the literature review discussed in earlier chapters. From the findings several psychological explanations can be derived which throw greater weight behind the findings of the survey. Marketing, in those firms which have adopted it, is seen as a supportive activity and its role is yet to be explored fully.

One strong observation from these case studies is that of the lack of well defined marketing objective within each of these organisations discussed above. The objectives are vague, brief, unpacked and often too generalised and this is being reflected in the marketing planning and strategies across the firms.

A second observation is, the emphasis on personal contact and personal selling by all the cases reported. This again is reflected in literature review and the results of the survey in Chapter 7. The survey reported in Chapter 7 showed that personal contact ranked second in terms of efforts expended on marketing activities. From these case studies there was strong and concerted effort to maintain a strong hold on existing clients. It was explained that since the enterprises cannot create demand, it is very appropriate to maintain existing markets.

Thirdly, there is a general lack of understanding as to how to best evaluate marketing function within the individual organisations. This is probably due to lack of precise and

specific marketing objectives upon which quantifiable performance criteria can be built, thereby providing the marketers with specific course of action.

Lastly, the case studies reflect earlier argument that marketing as a management function is new to the industry. Even though the ages of all the firms studied range from 40 years to 130 years only one has an established marketing unit that has outlived a decade. The marketers also reflected the fact that they still battle with staff of other operating units of the organisations in order to get marketing accepted as a mainstream function.

Construction clients buying behaviours are changing. Scientific managerial techniques are now employed with emphasis being placed speed of delivery of services, value based services, and cost-time-quality performance and though contract price still remains predominant, the clients are becoming more and more less price sensitive. Marketing is a dynamic process and marketing techniques need to change as the buying mechanism evolves through various stages. Marketing orientation is concerned with such dynamics and consequently is of particular relevance to the future of firms in the industry. Failure to understand the most appropriate marketing techniques during different stages may reduce clients susceptibility to the marketing initiative, or possibly destroy the chances of their company winning over a particular client.

Having observed these shortcomings of present approaches to marketing in the industry, a framework which provides a logical marketing performance analysis through strategic management process has been proposed. This framework allows the managers to follow a targeted approach to performance improvement which facilitates more efficient evaluation of overall achievement of the organisation's marketing objectives. It suggests a systematic approach through planning, implementation and evaluation processes. Finally the framework incorporates a component of marketing intelligence which provides an update on the existing marketing programmes, trends in the industry, the markets, and other competitors. The marketing intelligence unit is designed to guide the firm in future planning, accounting, budgeting, innovation and to improve sensitivity to changes in the construction environments.

Chapter XI

**Summary of Findings, Conclusions, and
Recommendations**

Chapter Eleven

Summary of Findings, Conclusions, and Recommendations

11.1.0. Introduction

This thesis set out to evaluate current marketing practices in the UK construction industry with an overall objective of determining best practice, and to develop a system against which firms can evaluate their marketing performance. To achieve this objective, the whole premise of the marketing concept as a distinct subject, was first reviewed. Going beyond this a thorough review of construction industry's view on, attitude to, and perception on marketing was conducted. The objectives, scope and methodology pursued are all explained in Chapters 1 and 2.

Unfortunately, literature review of marketing in construction context, there was one setback. There is generally a paucity of literature or previous studies on this topic. Marketing as a management function in the UK construction industry is very much a new phenomenon. Previous studies have shown that marketing only started receiving attention over the past two decades.

From conceptual explanation of marketing as a management function in literature, it has been recognised that the purpose of marketing is to create customer wants or needs. Hence, it was argued that any business enterprises has two basic function: - marketing and innovation. Within the construction industry, however, there is a prevailing conceptual difficulty as to what marketing actually means and its applicability to construction. As a results of this many senior managers still exhibit naive marketing attitude while others are complacent.

Despite all these problems there is a growing interest in marketing in the construction industry. It was with this background that the programme of this research was embarked upon with the aim of determining the best practice.

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11.2.0. Research Objectives

In general management literature, marketing has been identified as a central function capable of enhancing business growth and survival. A review of literature on marketing of construction services has shown that this important function is less-well developed in the UK construction industry. It was with this realisation that the research was embarked upon to remedy these shortcomings not only for practitioners in the industry but also for the growing academic community with interest in marketing in construction. Through these objectives, the research hopes to evaluate the marketing function as currently performed within the construction firms, establish a number of strategic issues and at the same time identify activities which offer distinct marketing features for construction, to disseminate best practice and suggesting any improvements.

11.3.0 Research Methodology.

Having set out the objectives of this research, a six step methodology (Sections 1.6.0 & 2.2.0) was developed in accordance with the nature and scope of the research. These steps include, comprehensive literature survey, pilot survey, industry-wide survey, model development, model validation and case studies.

11.4.0. Findings of the Research

Developments in marketing has been helpful in postulating the appropriate direction relationship between demand and supply. The importance of considering demand and supply factors affects not only the realm of marketing but also the analysis of competition. Construction industry as a service and fragmented industry, presents problems of communication, cooperation and conflict. The aim of this research was to evaluate the management and practices of the marketing function in the UK construction Industry through the objectives set out in Chapter One (1.2.0). The following sections summarise the how these objectives were achieved.

marketing resources were investigated: skill and expenditure. The survey shows that there is a gross absence of marketing skill and professionalism in the industry. From the findings, 64% of the respondents do not have professional marketing staff and only 2.86% make regular use of external marketing agents. On expenditure, more than 68% of the respondents spend less than 2% of their annual turnover on marketing programmes.

Marketing orientation was another area that this research tried to address. A comparison of the attitudes of the construction organisations towards six attributes namely engineering, R&D, production, profit, professional skill and marketing. Marketing ranked fifth only ahead of R&D. Furthermore, it scored less than 0.50 on the relative importance index scale.

As a way of evaluating marketing practices in the industry, the survey was designed to study the commitment of enterprises to marketing. The industry in general is not committed to marketing. A comparison between contractors and the designers showed that contractors are ahead of the designers in all aspects of marketing.

11.4.2 Marketing Activities

One of the objectives of this research was to identify a wide range of marketing practices as currently employed by construction firms. A review of literature on marketing strategies for construction services has shown that for the past two decades, changes in the construction industry have resulted in a subtle reshaping of the scope of marketing in the construction industry. From the literature review and consultations, a preliminary list of marketing activities was compiled (Table 2.2). These activities are concerned with aligning organisation's business objectives with those of the client and to ensure that the organisation is well placed to take maximum advantage of changes in the business environment.

11.4.3 Marketing Objectives

Divergence of objectives and competitive behaviour amongst the members of construction team detract from proper understanding of achieved performance, especially satisfaction felt by the clients and comparisons of actual performance with client's objectives. In order for a strategic marketing plan to be successful a company should integrate all departments into the plan. For example, for a construction company, all members of the site staff, who will have direct contact with the client or consultants should be aware that they are creating an impression of their company.

Objectives are specific results that an organisation seeks to achieve in pursuing its basic mission. The most important ingredient of successful plan implementation is recognition of the necessity to express plan objectives in quantitative, measurable and objective terms. Strategy objectives are derived from strategic elements. Because the elements are almost always qualitative, they are not amenable to measurement and quantitative analysis. The aim of strategic elements is to put the goals of the owners into language. The objectives are the text from which we can extract and further define quantitative measures which will provide the milestone with which to track progress towards the fulfilment of the defined elements.

With these considerations in mind, the questionnaire was designed in such a way as to determine first and foremost, criteria for evaluating marketing performance in construction enterprises whether they be measurable objectives or otherwise. These measures (performance indicators for marketing objectives), were selected on the basis on literature review and pilot survey (See Chapter 2; Table 2.1).

11.4.4 Factors Influencing Marketing Practice

A review of literature suggests revealed that shortcomings of marketing in the construction industry are as a result of various factors namely: organisational characteristics; management style; marketing skills; corporate values; commitment; and marketing orientation. The results of multiple regression analysis of these factors show that they

account for 64.3% of variance in the achievement of marketing objectives and for 71.5% in the variation of the effectiveness of marketing programmes.

11.4.5. The Model

The findings of the survey formed the basis of this model development. The model offers a system of self evaluation by individual organisation and to locate marketing position relative to other firms operating within the same environment. The motivation behind its development was a concern to identify whether a set of principles exists that explains 'quality marketing practice' (i.e. the carrying out of marketing in an effective and efficient way rather than just the planning of marketing), demonstrated by assisting the managers to follow a targeted approach to performance improvement thereby facilitating more efficient evaluation of overall achievement of the organisation's marketing objectives.

11.4.7. Model Validation.

The model validation exercises were discussed in Chapter 9. Three different approaches were adopted. First, to test the characteristic average grading function for the industry as given by the model in Chapter 8. Secondly, to demonstrate how to apply this model responses from five firms were used for a worked example. The interpretation of results are also presented. Thirdly, sensitivity analysis to study the responses of grading function to changes in the variables of the model construct was carried out using a spread sheet prepared using MICROSOFT EXCEL PACKAGE.

The three steps show that this model can , with a high degree of accuracy show the marketing position of a firm and also detect any managerial and resource deficiencies concerning marketing practices within the firm. The validation exercise has again demonstrated the lack of competence regarding the organisation and the management of the marketing function in the UK construction industry. The tests re-echoed a general lack of commitment on the part of senior managements in the industry to marketing function.

11.5.0. Case Studies and Interviews

The seven cases studies conducted show the same characteristic attitude of construction organisations as discussed in the literature review in the earlier chapters of this thesis. From the findings several psychological explanations can be derived which throw greater weight behind the finding of the survey as reported in Chapter 7. Marketing, in those firms which have adopted it is seen as a supportive activity and its role is yet to be explored fully.

Finally, the case studies reflect earlier argument that marketing as a management function is new to the industry. Even though the ages of all the firms studied range from 40 years to 130 years only one has an established marketing unit that has outlived a decade. The marketers also reflected the fact that they still battle with staff of other operating units of the organisations in order to get marketing accepted as a mainstream function.

11.6.0. Conclusions

The unique characteristics of the UK construction industry has been described as being responsible for the method of production, organisation, financial control, price determination and procurement methods. It is a fragmented industry with a growing number of small employers and self-employees, with a continually diminishing number of larger firms.

As a result of the recent developments in the construction environments particularly increasing competition among construction, fluctuation in demand for construction services, political changes, and technological developments construction firms are beginning to implement management functions such as marketing, considered irrelevant in the past.

The traditional method of competitive bidding and tendering still remains the most dominant

method of procurement in the industry although there are shifts in recent times to other methods such as management contracting and design and build. Changes in the construction industry have transformed and diversified the industry's skill and training needs. However, the fragmented structure of the industry and its volatility have made it difficult to meet these new and changing needs

There are, however, some welcome findings from the results of this research which are worth mentioning. The research suggests the notion that the top management in the industry are not interested in marketing is no longer tenable. From the findings, 65% of the respondents indicated that responsibilities of marketing within their firms are being handled by the managing director or a senior partner as the case may be. The lack of commitment and effectiveness can be explained to be as a result of marketing being a secondary responsibility in addition to others considered to be more important.

The practices of the marketing function in the construction industry in general terms, have shifted from the traditional approach of distribution of brochures and client entertainment to a more strategic approach as can be seen from the order of effectiveness. Firms are beginning to adopt practices of strategic alliances and relationship marketing features. These results have shown that distinct marketing features have emerged within the UK construction firms having primary focus on building long-term and mutual business relationships.

Up till now, no comprehensive quantitative model for evaluation of marketing function is available to assist the construction firms in assessing their marketing practices. A major outcome of this research is the development and validation of a quantitative model based on elements of efficiency and effectiveness of marketing practices within the UK construction firms. Although it is still at a preliminary stage it holds a great potential as an effective instrument for evaluating marketing practices in construction.

11.7.0. Recommendations

Strategic growth results from an awareness of the opportunities and needs created by changing market environment. The marketing function must become central to the organisation and shape its future market strategy. A good understanding of the needs of the market arising from a greater attention to effective boundary regulation will lead to beneficial market segmentation and an inclination towards innovation, administratively as well as technically. Unfortunately, the UK construction industry is yet to achieve any significant success in the planning and management of marketing function.

Corporate strategy is described as a way of doing things, methods and finding favourable conditions for achieving objectives, to impose upon the market place, the time and conditions of trade preferred by oneself. Construction enterprises however, tend to ignore marketing in their development and application of corporate strategy. As currently employed in construction companies, marketing is mainly tactical sales and advertising rather than being a strategic development of a client-orientated business. In several companies within the construction industry, marketing is still seen as an extension of, or part of responsibilities of operations managers or other specialists rather than as an independent function. Marketing as a service to enhance performance has only recently been introduced in a number of companies and is still appears to be relatively poorly integrated and organised and the practice varies considerably. In most companies the marketing function is only located in the regions where there is the need to procure jobs to maintain a specific workload.

The way forward is for construction firms to adequately assess their markets, both now and where they plan to be in the future. They must realise that marketing incorporates many business activities both internal and external to the companies and embodies both a concept and procedure in its application. The concept of marketing is that of focussing the activities of all departments of a company on the needs of the customer, and then organising the company's resources to identify and satisfy those needs profitably. Marketing as a

philosophy stems from recognition that a company can only survive by profitably providing goods or services that the customer wants to buy. Again, too often the link between survival and success, and provision of what the customer wants, rather than what the company thinks the customer should want, is not made by construction industry bosses. In today's business environment, more than any preceding era, the only constant is change. To be successful, organisations must effectively manage change, continuously adapting their bureaucracies, strategies, systems, products, and cultures to survive the shocks and prosper from forces that decimate the competition..

11.8.0 Further Research

Many misconceptions and myths exist in the UK construction industry about marketing that need to be verified. One of such myths is that marketing like many other management functions can not be quantifiable measured. A system (model) through which marketing practices can be evaluated has been developed. However, some new areas have opened up by the research and need further investigations. These include:

- (i) the role of the client in the shaping of marketing policies with the enterprises;
- (ii) how competitive the UK construction industry is compared with other competitors;
- (iii) development of a model marketing unit within a construction organisation;
- (iv) what role should marketing play?

Any future study on marketing of construction services should seek to address these issues. It is also recommended that a periodical review of the model be conducted every two years to monitor any shift in the average grading function of the industry. This will help any marketing orientated firm within the industry to adjust its marketing position accordingly.

Development of an expert system probably based on the system framework proposed in Figure 10.7 seems a viable option for improving marketing performance. Seeing that expert systems are better at choosing information for management operations than novices, it would be appropriate to examine possibilities for building expert system programmes for information selection. Such information should be from a database that recognises various determinants of effective marketing practice in construction and should provide possibilities for linking with other construction management packages such as estimating, claims, CPM and a host of others.

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APPENDICES

APPENDIX A1

APPENDIX A1
RESEARCH QUESTIONNAIRE

Introduction

This questionnaire for industry-wide survey was structured in accordance with the aims and objectives of the research. The questionnaire was designed on a fully structured and non-disguised basis, with the aim of obtaining scaled judgments by the respondents on issues relating to the objectives of the research. This was to enable tests of performance based upon the responses of the respondent companies.

Covering Letter

28 February 1994

Dear -----

Construction Marketing Research

Recent studies, comments and seminars on marketing in construction industry have shown that that the industry lags behind in application of the marketing function in its business. The influence of marketing on corporate performance has been researched and written about extensively. However, very little of these studies have focused on the construction industry.

The efforts of the past studies on this topic have mainly concentrated on auditing of the marketing function. This research is aimed at developing a system model for a more effective marketing practice in construction. By this, the research hopes to provide Construction firms with specific marketing actions for better performance and business development. We hope you will feel able to participate in this research. *Every information given will be treated in strictest confidence and used for academic purpose only.* We hope you will feel able to participate in this research

Yours Sincerely.

S. B. Yisa

The Questionnnnaire

Section A: General Matters

A 1.

Job title of respondent:-eg.

1.

Managing Director,

2.

Corporate Marketing director,

3.

Marketing Executive

4.

Marketing manager, etc

5.

Others (please specify)

A 2

Which of these classifications best represent the activities of your organisation ?

1.

Consulting Architects

2.

Consulting Civil Engineers

3.

Quantity Surveyors

4.

Construction management

5.

Specialist contracting

6.

Project Management

7.

Others (please specify)

A 3

Please indicate as shown below an estimate of your organisations average annual turnover over the past five years

1.

£0m - £50m

2.

£50 - £100m

3.

£100m - £500m

4.

£500m - £1000m

5.

£1000m +

A 4.

Please indicate below an estimate of the total number of full time employees in your firm

1.

0 - 50

2.

50-100

3.

100 -500

4.

500 - 1000

5.

1000 +

A5 How many of your firm’s employees are working wholly in the area of marketing?

1.

0 - 10

☐
2.

10-50

☐
3.

50 -100

☐
4.

100 - 500

☐
5.

500 +

☐

A6 Does your firm employ full time staff in the marketing area who are marketing professionals?

- YES

☐
- NO

☐

A7 How often do you use the services of marketing consultants?

1. Never

☐
2. Occassionally

☐
3. Regularly

☐

A8 Please indicate an estimated average percentage of your annual turnover spent on marketing

1.

0% - 5%

☐
2.

6% - 10%

☐
3.

10% +

☐

Section B: Marketing Profile

B1. [a] Does your firm operate a formal marketing programme?

N B:By formal marketing programmes we mean institutionalised procedures, leading to the explicit statement of objectives, strategies and programmes for marketing activities and subsequent execution of those programmes

- YES

☐
- NO

☐

[b] If yes, who sets the marketing programmes?

- 1.Board of Directors

☐
- 2.A Partner

☐
- 3.Marketing Director;

☐
- 4.Marketing Managers;

☐
- 5.Others (Please specify);

☐
- ☐
- ☐

[C] Please indicate the time frame for planning your marketing programmes.

1. 0 to1 year

2. 1 to 2 years

3.2 to 3 years

4. 3 to 5 years

5. Over 5 years
- ☐

☐

☐

☐

☐

B 2. To top management of your firm how high a priority is the successful execution of the marketing programmes in relation to overall corporate objectives?

1. Very low;

2. Low

3. Average;

4. High;

5. Very high.
- ☐

☐

☐

☐

☐

B 3. How is the marketing function managed in your company? Please tick as appropriate.

1. Marketing is managed by a Partner/ Director/ senior manager in addition to other responsibilities

☐
- OR
2. We have a structured marketing department headed by an employed marketing executive.

☐
- OR
3. We have a structured marketing department headed by a marketing executive who is a director/member of the Board

☐
- OR
4. Other arrangements (Please specify)

☐

B 4 Please indicate on a 10 point scale your firm’s orientation towards the following (1=very low to 10=very high).

- | | |
|--------------------------|----------------------|
| 1. Engineering | <input type="text"/> |
| 2. Research &Development | <input type="text"/> |
| 3. Marketing | <input type="text"/> |
| 4. Production | <input type="text"/> |
| 5. Profit | <input type="text"/> |
| 6. Professional skill | <input type="text"/> |

Section C: Marketing Programmes & Activities

C 1. Please indicate the importance of the following objectives to your marketing programme., Pleas use a 10 point scale, Where, 0 = not important,....., 10 = very important.

- | | | |
|-----|---------------------------------|----------------------|
| 1. | Increased market share | <input type="text"/> |
| 2. | Cost effectiveness | <input type="text"/> |
| 3. | Market penetration | <input type="text"/> |
| 4. | Competitiveness | <input type="text"/> |
| 5. | Increasing turnover | <input type="text"/> |
| 6. | profitability | <input type="text"/> |
| 7. | Quality assurance | <input type="text"/> |
| 8. | Return on investment | <input type="text"/> |
| 9. | Productivity | <input type="text"/> |
| 10. | Innovations | <input type="text"/> |
| 11. | Increasing bidding success rate | <input type="text"/> |
| 12 | Improve corporate image | <input type="text"/> |
| 13 | Maintain client loyalty | <input type="text"/> |
| 14 | Mergers/Acquisitions | <input type="text"/> |
| 15 | Others (Pleasen specify) | <input type="text"/> |
| 16 | _____ | <input type="text"/> |

C 2. Please indicate on the scale of 1-5 the amount of effort put into the following marketing activities in your firmwhere,1 = no effort, ..,5 = maximum possible effort.

- | | |
|------------------------------------------|----------------------|
| 1. Advertising; | <input type="text"/> |
| 2. Public relations/Publicity; | <input type="text"/> |
| 3. Publicationsin professional journals; | <input type="text"/> |
| 4. Market Research; | <input type="text"/> |
| 5. Exhibitions/films shows/Conferences; | <input type="text"/> |
| 6. Corporate Identity; | <input type="text"/> |
| 7. Sponsorships of events; | <input type="text"/> |

8. Aquisition/Mergers	<input type="checkbox"/>
9. Promotional gifts	<input type="checkbox"/>
10.Conferences;	<input type="checkbox"/>
11. Others (please specify)	
_____	<input type="checkbox"/>
_____	<input type="checkbox"/>

Section D:Marketing Objectives and Performance

D1. Does your firm monitor its marketing programmes?

YES	<input type="checkbox"/>
NO	<input type="checkbox"/>

D2. How effective have these marketing activities been over the last three years, bearing in mind that the past three years have been characterised by periods of activities and inactivity in the construction industry? Please indicate on a 10 point success scale, where, *0=not effective , . . .,10 =very effective:*

1. Advertising;	<input type="checkbox"/>
2. Public relations/Publicity;	<input type="checkbox"/>
3. Publications in professional journals;	<input type="checkbox"/>
4. Market Research;	<input type="checkbox"/>
5. Exhibitions/films shows/Conferences;	<input type="checkbox"/>
6. Corporate Identity;	<input type="checkbox"/>
7. Sponsorships of events;	<input type="checkbox"/>
8. Aquisition/Mergers	<input type="checkbox"/>
9. Promotional gifts	<input type="checkbox"/>
10.Conferences;	<input type="checkbox"/>
11. Others (please specify)	
_____	<input type="checkbox"/>
_____	<input type="checkbox"/>

D3. Please indicate the success or otherwise of your marketing activities in the achievement of the following objectives, using a 10 point index scale where, *0 = No success, . . . , 10 = highly successful*

1. Increase market share	<input type="checkbox"/>
2. Cost effectiveness	<input type="checkbox"/>
3. Market penetration	<input type="checkbox"/>
4. Competitiveness	<input type="checkbox"/>
5. Increasing turnover	

6. profitability
7. Quality assurance
8. Return on Investment
9. Productivity
10. Innovations

- | | | |
|-----|---------------------------------|--------------------------|
| 11. | Increasing bidding success rate | <input type="checkbox"/> |
| 12 | Improve corporate image | <input type="checkbox"/> |
| 13 | Maintain client loyalty | <input type="checkbox"/> |

D4. Please provide in the space below any additional comment which you think will be very useful for this research.

D5. An interview with respondents is a very important part of this research. Please would you be available for such an interview?

Yes ☐

No ☐

D6. Name: _____
Tel. No. _____

D7. Will you like to receive a summary of this survey?

Yes ☐

No ☐

D8. Name and address of firm of firm:

Thank you for your assistance in filling this questionnaire. Kindly return the completed questionnaire to:

S. B. YISA

APPENDIX B

APPENDIX B
Interview Questionnaire

Introduction

From the preliminary analysis of the survey, several issues emerged which needed proper investigation in order to understand the full concept of marketing practices within construction enterprises. In order to address these issues, a case study was designed in two formats: (1) person-to-person interview; (2) self administered mail survey. The case studies are reported in chapter 10. The objective of these case studies was to provide psychological explanation to many issues that might arise from the main survey and the literature review

Introductory Letter

For attention of:

Re: Marketing of Construction Services

During the month of March 1994, we sent you a research questionnaire on the subject of 'Marketing of Construction Services', which you duly completed and returned to us. Further to this, you indicated your willingness to assist us should we in future require such an assistance. We are pleased to let you know that your previous contributions are highly appreciated. The research team has commenced work on the analysis of the responses to the last survey. From these responses however, many further questions have emerged on which your opinion would be invaluable to our study. To facilitate this we have structured these issues in form of a questionnaire. We would appreciate your helping to complete the enclosed questionnaire.

The objectives of this research still remains to provide construction enterprises with specific marketing actions for better performance and business development. The executive summary of the report will be made available upon request as indicated at the end of the enclosed questionnaire. We hope you will feel able to continue to participate in this research.

Yours Sincerely

S. B. Yisa

The Questionnaire

Q1 Please indicate which of the following best describes the characteristics and the size of your organisation.

Contractors

- 1)

A Large international civil/building contracting company
- 2)

A medium-size international civil/building contracting company
- 3)

A medium size national building/civil contracting company
- 4)

A medium size regional building/civil contracting company
- 5)

A small size regional building/civil contracting company

Or

Design Practices

- 1)

A Large international multi-disciplinary design practice
- 2)

A medium-size international design practice
- 3)

A large- size national multi-disciplinary design practice
- 4)

A medium size regional design practice
- 5)

A small size regional design practice

Q2 Please sketch below the organisation structure of your company, indicating the position of your marketing or business development department in the structure.

Q3.(a).For how long has your organisation been in existence in the UK? (Please if possible be specific)

(b).What is the age of your marketing department? (Please if possible be specific)

(c).How long have you been in charge of the marketing activities of your organisation? (Please be specific)

Q4 The responses to the previous questionnaire show only one out of three firms carry out formal planning of marketing programmes.

(a) Please can you give a brief description of the objectives of your marketing programmes.

(b) Please describe briefly how your corporate marketing strategies are formulated in relation to overall objectives

c) What are the structures (management, physical, financial and technology) available for implementation of marketing programmes within your organisation?

Q5. What role do the employees of other departments play to enhance the success of your marketing programmes? What strategies do you employ in getting them involved with marketing?

Q6 From the results obtained from the preliminary analysis of the previous survey, three out of four respondents indicated that they do not plan for their marketing programmes beyond the period of 2 year.

(a) Why is this? Is this a reflection of general planning attitude of the construction industry or are there other external reasons? Please list them.

(b) What planning period would you consider to be;

- (1) Short - term?

_____ to _____ Years
- (2) Medium - term?

_____ to _____ Years
- (3) Long - term?

_____ to _____ Years

Q7 Please describe how the the marketing function is evaluated in your organisation.

Q8 One strong objective of construction marketing as observed from our previous survey was to maintain and manage existing clients. What strategies do you use in marketing to existing clients?

Q9 a In marketing your services to existing client, what strategies do you employ at pursuing the next engagements with the existing clients?

b) What are the marketing strategies employed at strengthening and increasing your firm’s capabilities and competitive advantage to continue serving the clients?

(c) How do you make the client disposed to use your firm again in future if and whenever the need arises?

Q10. In our study of the clients’ response marketing of construction services, we found that the most important strategy employed by the clients in deciding on whether or not to engage the services of a firm for the first time is to obtain a word of recommendation from the firms’ previous or existing clients with the objective of getting an assessment on the firms’ past performance records, financial stability of the firm, reputation and past relationships.

(a) How do you work at ensuring that your organisation receives a good recommendation for future references while seeking new orders elsewhere from new clients?

b) Does your organisation employ any feed back strategy for its marketing programmes directed towards a particular client during and after a particular project execution? If yes please describe the procedures and the objectives.

Q11 As part of your market research programme, do you research other competitors? If yes, how do you assess them in order to ensure a competitive advantage over them?

- Q12

What role do your marketing staff play at influencing the ‘mark-up’ of tender quotation?
- Q13.

How satisfied are you with your performance on your marketing activities and why?
- Q14

What changes do you think are needed, if any, regarding your organisation’s attitude to marketing?
- Q15.

What factors in your own opinion are responsible for construction industry’s general lukewarm attitude to marketing?.
- Q16

Do you see the role of marketing in your organisation changing in the nearest future compared with what it is now?. If yes, what are your reasons and what is it likely to be?
- Q17

Generally, do you consider the role of marketing in your organisation as central or supportive in the achievement of overall corporate objectives? What are the reason for your answer?

Q18 Please provide in the space below any additional comment which you think will be very useful for this research.

Q19. Will you like to receive a summary of this survey?

Yes

No

Name

Job title

Organisation

Address

Thank you very much for your cooperation and time taken to complete this questionnaire. Certainly your contribution will go along way in helping to improve marketing practices within construction organisations, which has been the primary objective of this research.

Yours Sincerely

S. B. Yisa

APPENDIX C

Sample Frame for the Research

Introduction

The sample frame for this research was drawn up from various sources as shown below.

- 150 Building and Civil engineering contracting companies, drawn up to include the top 100 companies in the UK as listed in *Contractors File (1993)*, a joint publication of Institute of Civil Engineers and Chartered Institute of Building, Business directories, Construction Contract journals and Building Employers Confederation Directory;
- 150 Architectural consulting firms, drawn from Royal Institute of British Architects Directory of Practice 1992;
- 150 Civil/structural engineering consulting firms obtained from Association of Consulting Engineers.

Note that (*) represents those firms that respondent to the questionnaires or the interviews at the various stages of the research.

Contractors

*Amec	*Associated Asphalt
*Wiltshier Construction Ltd	Turner & Sons Ltd
*Balfour Beatty	*Tamac Construction
*Roland Bardsley	*Tarfalgar House Construction
*Biwater	*Costain Building & Civil Eng. Ltd
Henry Boot & Sons	*Bovis (P & O Group)
*Bowman & Kirkland	*Bryant Construction
Roger Bullivant	*Christiani & Nielsen
*Moss Construction	*Clugston Group

APPENDIX C

Sample Frame for the Research

Turner Group Holdings Ltd	Costain Group
*Bernard Sunley & Sons Ltd	*Lovell Partnership
*Eve Group	*Fitzpatrick
*Taylor Woodrow Design & Build	*GA
*Shepherd Construction	*Galliford
M J Gleeson Group	Hallamshire Construction
Harbour & General Works	*Myton Ltd
*Higgins Group	*Norwest Holst Ltd
*Jarvis Sleeman construction Ltd	*Edmund Nuttall Ltd,
*Kendrick Construction	*Kier Group
Sol Construction Ltd	*Kilroe Civil Engineering
*John Laing	Moss Construction Northern Ltd
*Try Construction	*James Longley
*R Mansell	Clugston Construction
Hall & Tawse group Ltd	R J McLeon (Contractors)
*Alfred McAlphine	*MWD
McLaughlin & Harvey	*Mivan Neilcott Construction Group
Morrison Construction Group	Nolan Davis Ltd
*John Mowlem Construction	Pochin Plc & Contractors Ltd
J Murphy & Sons	*Chap Construction Ltd
*Pipeline Constructors Group	Christiani & Nielsen Ltd
Henry Boots & Sons Plc	*Roadworks
Bartlett Construction Group Ltd	Brophy Plc
Seddon Group	Barrat Developers
*Shanks & McEwan (Contractors)	E. W. Beard Ltd
Shepherd	Partington Building Group Ltd
*William Sindall	Monk Construction Ltd
John Sisk & Son (UK)	McLaughlin & Harvey Plc
Sol Construction	Kyle Stewards Ltd
Takenaka (UK)	*Isis Construction Ltd
*Tarmac	J. Jarvis & Sons Plc
*Tilbury Douglas	*William Cowlin & Son Ltd

Tafalgar House	Croudace Ltd
P Trant	Cruden Construction Ltd
Bovis (P & O Group)	*Ashby & Horner Ltd
*Turriff Construction	Herbert Bagaley Construction Ltd
Wade Adams Construction	Bricknell Holdings PLC
Warings Contractors Group	Wiggins Construction Ltd
*Wilcon Construction	Wilmott Dixon Academy Construction
Wiltshier	*A Hart & Son (Wolverhampton) Ltd
*George Wimpey	*A W Taylor (Builders) Ltd
*Wrekin Group	A. E. Thompson (knowle) Ltd
Willett Ltd	*Abstruct building Contractors
Edward Wood & Sons Ltd	Ace Building Limited
*A. B. Hamilton Construction	Alfred McApine Construction Ltd
Austcliffe Building Contractors Ltd	ARB Construction Co. Ltd
Henry Gough & Son Ltd	Philip Snow Ltd
A. M. Griffiths & Son Ltd	

Engineers

Remi Adelaide	*Adams Consulting Engineers
*Allot & Lomax	Allen gordon & Co.
Andrew kent & Stone	W.S. Atkins Consultants Ltd
*Babtie Shaw & Morton	*Barneveld Consultants
Bedford & Eccles	Bingham Cotterell Ltd
*Bingham Yates & Partners	*Binnie & Partners
Bland & Swiftnorman	Bleazard & Partners
Blyth & Blyth AssociatesRoy	*Bolsover & Associates
Brazier Holt & partners	Peter Brett Associates
*JRBA Limited	Broad and Gloyens
*Anthony Brown & Partners	Robert Bruce & sons
*CECP Limited	*H. K. Cheng & Partners
Civil Eng. Dynamics Ltd	*Cogan & Shackleton

APPENDIX C

Sample Frame for the Research

*Cooper MacDonald Plc
Ferguson & McIlveen
*Gregory & Associate
Hannah, Reeds & Associates
*T. Harley Haddow & Partners
Arch. Henderson & Partners
*Lawrence Hewitt Partnership
Hoares Lea & partners Lt
HWPB Partnership
*R. T. James Ltd
*Jubb & Partners
*Kennedy & Donkin Group Ltd
James-Carrington & Patn. Ltd
Jenkins & Potter
*Kirkman & Bradford
Knight Piesold & Partners
Lardi Cox & Partners
Derek Lofty & Associates
*W. J. McDowell & Partners
*McGladdery & Partners
McKechnie-Jarvis & Graham
*McLellan & Partners Ltd
Matan & Partners Limited
Merz Orchard
*Mitchell, McFarlane & Partn.
Brian Moorehead & Partners
L.G. Mouchel & Partners Ltd
*MRM Partnership
*NCL Steward Scott Ltd
Nickson Davis Consulting Eng.
*Gerard Pakes Consultants
Parkman Consulting Engrs.

Cowan & Linn
*Grantham brundell & Farran
Haiste Group Limited
Harding, Mcdermott & Partn.
Harvey, McGill & Hayes
L. N. Henderson & Associates
Higgins & Pennington
Hurst, Peirce & Malcolm
Isherwood & Boyd Ltd
Alan Johnston Partnership
*Kenchington Ford Plc
Kirk McClure Morton
Jampel Davidson & Bell Ltd
*JMP Consultants Ltd
*Kirkpatrick & Partners
Laird Menzies Partnership
Livesey Henderson
M. McCann & Partners
*McDowells Limited
*Mcgregor Associates
A. J. McKay & Partners
Mason Pittendrigh
Merz & McLellan Ltd
MFD International
*Montgomery-Smith & Partn.
*Mott MacDonald Group Ltd
C. F. Mountain & Partners
D. R. Murray & Associates
*K. E. Nicholson & Associates
T. P. O'Sullivan & Partners
*Parkman Buck Limited
W. Paszkowski & Partners

APPENDIX C

Sample Frame for the Research

Peel & Fowler
Petrekin Consultancy
R. J. Piggott
Powell Tolner & Associates
L. A. Salter & Partners
*I. H. Ritchie
A. F. Roessler & Associates
*Edward Roscoe Associates
Rose & Partners
*Donald Rudd & Partners
*Simpson Associates
*Slender Winter Partnership
*Taylor & Boyd
S. B. Tietz & Partners
Travers Morgan Consulting Group
*Upton McGougan & Partners
*Wallace Stone & Partners
*Jon Walton Associates
*Robert West & Partners
*White Young
Geoffrey Wilkinson Holdings Ltd
*R H Williams associates
Williams & Shaw
*Woolgar, Hunter & Partners
*ZMCK Consulting Engineers
*Ove Arup Partnership
*Atkinson Peck Consulting Engineers
Allan Baxter & Associates
*BMMK & Partners
*Bonacci Winward Ltd
Budgen Partnership

*Pell Frichmann & Partners
Pick Everard
*Posford Duvivier

*Rendel Palmer & Tritton Ltd
*H. Philip Rockhill & Associates
Rofe, Kennard & Lapworth
*Douglas Rose & Partners
Roughton & Partners
Simpson Associates Ltd
*Simpson Coulson & Partners
Sir Frederick Snow & Partners
Thorburn Plc
*Colin Toms & Partners
Austin Trueman Associates Ltd
*Veryard & Partners
Walton Garden & Partners
*Watson Hawksley Group Ltd
*Whitby & Bird
Whybrow & Associates
*Mel Williams Partnership
Sir Owen Williams & Partners Ltd
*The Willock Practice
*Wren & Bell
Alexamder Flett Associates
*Associated Structural Design
*Maurice Baguley & Partners
The Baynham Meikle Partnership
BMMK & Partners
Bryan Peckman

Architects

*Bloomer-Tweedale	*Building Design Practice Ltd
*Butler Douglas Partnership	*Coterell Alan Partnership
*Hudson Eric Architects	*JKF Ltd
*Lewis and Percival	Mason Richards Partnership
McAlster Peter	Norman & Dawbarn
Twentyman Percy & Partners	Wheeler Barton
*Woodhams Leonard	*Ralphs & Mansell
Abbey hanson Rowe	Arrol & Snell Partnership
Baart & Jame	*Michael Chartered Architect
Caterall Morris Jaboor	*Charlesworth & CO
*Javies Chartered Architects	*Eaton Manning Wilson
*Hughes & Abbott Chartered Achitects	Peachey Chartered Achitects
Roscoe & Bean	*Walls & Partners
FJ & MJ Meeson	Architon
*Barnett Ratcliffe Partnership	*Boardman Associates
Jenifer Fagence Associates	Horsley, Huber & associates
Brian Jones Architects	*Pickavance Associates
Kenneth Pittaway Architect	Francis Turner Architect
Gordon Forster Architec	*Architectural Projects Design Ltd
*Hickton Madeley & Partners	JSP Architects
Smith Hanley & Large	*Starbuck Chartered Architects
Bowles Whittick Young	Butler & Partners
Design to Build	Gillaspie's
*Harper & Sperring	Mason Richards Partnership
*Owen Roberts Achitects	*Rutherford Consultancy Services
*Simms Davies Partnership	Smith and Partners
Webb Gray & Partners Ltd	Abbott & Rowson
*Alan Cooke Associates	*ASPEC Architects
Architecture & Design Services	Armitage & Associates
*Associated Architects	Bailey Chartered Achitects

APPENDIX C

Sample Frame for the Research

Baker, Humphreys & Goodchild
*Richard Baker Chartered Architects
Bournville Architects
*Bower Mattin
Bundred Associates Ltd
Circa Design
Cooke & Partners
Crouch Butler
*Diamond (Architects) Ltd
*Edwards Associates
Frost Bradshaw Partnership
Gellion Associates
Hogben Nova associates
*ISH Partnership
*Richards Johnson & Associates
Lapworth Partnership
*Love Chartered Architects
*Martin, Ward & Keeling
McKewan & McKewan
Miller, Jones & Docker
Scotton Architects
*Seymour Harris Partnership
Temple Cox Nicholls Architects
*Turner Woolford Sharp
Walker & Partners
Thompson Architects
Dean-Walker Bateman Architects
*Forum Associates
Anderson Practice
*Development Design Partnership
J.Edwards Chartered Architect
*David Mills

Brian Bannister Partnership
Bonham Reynolds Associates
Clarke Baker Associates
*Broadhead Brown & Smith
*Byrd Architects
Collier & Associates
Cordin Associates
*Dalkin Associates
*Downward Sullivan Partners
*Francis IDG Associates Ltd
AJ Architects
*Hobbis Architects
Integrated Design Group Ltd
*Jenns Howl Architects & Designers
*Kelly & Surman
Levitt Chartered Architects
The John Madin Design group
McGowan Butterworth Architects
*MD Architects
*Multon & Partners
Seager Design
Taylor & Co Architects
*Tippins Partnership
Waites Architecture
Swan Associates
Clist Architect
*Simon Fletcher Architect
Trevor Hodgson Architect
William Blunt Architect
John Dutton Architect
AJR Green Chartered Architect
Sprason Architect

APPENDIX C

Sample Frame for the Research

Martin Timmins
*Truman Architects
Bryan Allum architects
Brown Langstone Matthews
*Gilmore Associates Ltd
Hayball Associates
Hodson & Partners
John Jones
*Mitchell, Johnson-Marshall
*David Robotham Limited
The Wilders Partnership
*David Dickinson & Associates
*Sutton & Wilkinson

*David Trewin Associates
David Wall Architects
*Kenneth Breeze
Corstorphine & Whight Ltd
Grima Architects
The Hitchman Stone Partnership
*Donald James & Partners
Laurie Day Design Group
John Pass Associates
*Shankland Cox Limited
Bolton Lomas bradshaw Architects
Hawkins Roberts & Williams
/*Onions & Onions

APPENDIX D

APPENDIX D

Publications Associated with the Research

1. Yisa, S. B., Ndekugri, I. E., Ambrose, B. (1995). The Marketing Function in the UK Construction Contracting and Professional Firms. *Journal of management in Engineering*, ASCE July/August 1995, vol. 11, No 4.

ABSTRACT: This paper reports on part of the research carried which addressed the aspect of management and organisation of marketing function. It noted that marketing is being conducted in an ad - hoc manner. Only one out of three firms surveyed employ marketing professionals or make use of services of external marketing consultants. Finally it emphasises the need for better understanding of what marketing really is and ways of improving its planning and implementation by both professionals firms and contractors.

2. Yisa, S. B., Ndekugri, I. E., Ambrose, B. (1996) "A Review of Changes in the UK Construction Industry and their Implications for Marketing of Construction Services". *European journal of Marketing* . Volume 30, No 3

ABSTRACTS: The external, social, economic and political environments determine the opportunities for work and thereby potential profit. Clients' needs and attitudes, like the external environment itself, are never static and therefore organisations need to adapt and respond to these fluctuations. Situated between the external and internal environment of an organisation and operating at the boundary of the organisation is the marketing function. There are many changes occurring in the UK construction industry: a levelling of the trade cycle; methods of placing contracts; increased emphasis on quality, experience and innovations; and increasing competition among firms, clients buying behaviour due to changes in the

clients' organisation and developments in technology. This paper evaluates the role of marketing in seeking to regulate the construction organisations' relationships with changes within the industry and its external environment.

3. Yisa, S. B., Ndekugri, I. E., Ambrose, B (1995d). "A Model for Evaluating Marketing Function in the UK Construction Industry"(Recommended for revision and resubmission by *Journal of Management in Engineering*, ASCE)

ABSTRACTS: This paper reports research into marketing practices in the UK construction industry. A self-administered questionnaire mail survey of 450 construction companies and firms was conducted. The aim of the survey was to investigate current marketing practices in the industry with a view to evaluating organisational performance in the marketing function. The findings suggest that commitment to the marketing function is very low, with behavioural relationships being of essence in decision making, rather than measured physical economic factors. A model is proposed for auditing corporate marketing performance based on efficiency through effort, marketing orientation, effectiveness of marketing activities and corporate ethical values.

5. Yisa, S. B., Ndekugri, I. E., Ambrose, B (1995e). "Identifying Factors which Influence Effective Marketing Practice within the UK Construction Enterprises" (Under review by *European Journal of Marketing*)

ABSTRACTS: Marketing strategy as currently employed in the UK construction industry in general, is in a tactical sales and advertising rather than in a strategic role where it has more potential for effective competitive strategies and development of client-orientated business. In several companies within the construction industry, marketing is still seen as an extension of, or part of responsibilities of operations managers or other specialists rather than as an independent function. This paper reports part of a research at evaluating marketing practices in the UK construction

industry. It discusses one of the objectives which sought to identify internal factors influencing effective marketing practices within the enterprises. A survey of 450 construction companies and professional firms across the United Kingdom was carried through a self-administered postal survey questionnaire. The findings of the research support the view that there is lack of commitment to marketing in construction leading to inadequate effectiveness of marketing programmes. Further to this five principal factors were identified as major determinant of the performance of construction enterprises in the practices of the marketing function.

APPENDIX E

APPENDIX E

Basic Statistical Tests for Marketing Evaluating

E1.0 Introduction

Statistics has gained dominance over thoughts and intuition in the evaluation and prediction of behaviour in all fields of study. According to Cannon (1994), statistics is the cornerstone of most decisions business people take and, indeed, the cornerstone of most government policy. Business decisions have to do with changes between plans and budgets and today's reality in terms of firms' orders, their capacity and employment levels. Statistics is no longer an obscure field of study of gamblers but now constitutes the science of decision making in the face of uncertainty. Uncertainty, as it is not possible to examine a population in exhaustive detail because of its size and limited research sources

Information derived from samples drawn according to specific criteria can be used to make estimates of, and inferences about the characteristics of populations. Hence, the importance of statistics. However, generalisations of this sort are not possible except consideration is first given to the question of how data are obtained and how experiments are conducted (Freud, 1973). An understanding of the different types of data obtainable is therefore essential in knowing which of these statistical tools to employ.

E2.0 Types of Data

There are two main types of data: primary and secondary data (Levin, Rubin, Stausen and Gardner, 1992; Levin and Rubin, 1994).

E2.1 Primary data

Data collected specifically for a research project. Primary data collection is necessary in situations where secondary data are either unavailable or inappropriate because of lack of relevance and/or accuracy. Primary data can be collected through a number of different methods such as described in Chapter 6. In some situations, several data collection options may be available for tackling the same research problems. Questioning and observation are

two broad approaches available for collecting primary data. And while the formality/flexibility of the data collection process, the nature of the sample, and the conditions under which data are collected vary from exploratory to descriptive to experimental research, the same basic data collection methods can be used under each. This principle was applied in the design of research instrument during the industry wide survey, the follow-up interviews, and the model validation exercises.

E2.2 Secondary Data

Secondary data are data collected for some purpose other than the the research situation at hand. They are usually readily available. For instance the discussions in Chapter five of this reports are centred on secondary data. A wide variety of secondary data are available for possible use by a researcher. However, the purpose for which secondary data were originally gathered will normally differ from the objective of the specific project the researcher is contemplating. Thus in marketing research like the one reported here, there are twofold challenge of identifying the various secondary data that may be useful and evaluating such data vis-a-vis the requirements of the research study. In this research study the secondary data was obtained from various sources such as *Housing and Construction statistics* which provides periodic forecast for construction new orders and output . An in depth analysis of this set of data enable us to understand the market trends and thereby assess their implications for marketing of services.

E3.0 Types of Scales and Attitude Measures

A number of factors determine which statistical technique should be used, but two of these are specially important: the type of data being measured, and the purpose of the statistical inference. The data generated as a result of an experiment can be classified under four different headings (data scales) called: nominal; ordinal; interval; and ratio scale;

E3.1 Nominal Scale

This is the lowest level of measurement. It is simply the classification of observation into categories. These categories must be mutually exclusive and collectively exhaustive. This means that no observation can appear in more than one category and all elements must be

included. An example is the classification of people by sex or religion. The breakdown of the respondents into those who carry out formal marketing planning and those who do not is a relevant example.

E3.2 Ordinal Scale

Ordinal scale is a set of numbers in which the magnitudes of the number represents no more than a rank order. An ordinal scale is distinguished from a nominal scale by its additional property of order among the categories. A category will be higher or lower than the adjacent category. However, ordinal scales do not explain the magnitude of differences between elements. They are sometimes called rank order scale. They feature prominently in this research in quantifying several variables like: Marketing orientation; marketing effort; and effectiveness of marketing programmes.

E3.3 Interval Scale

Interval-scaled responses are more powerful than ordinal-scaled responses because an interval scale has all the properties of ordinal scale and in addition, the differences between scale values can be meaningfully interpreted. It is a qualitative scale. Its main shortcoming is that it does not have “true zero”. An example of interval scale in the questionnaire was in question B2 where priority was measured on a five point scale from very low to very high.

E3.4 Ratio Scale

This has all the properties of interval scale with an additional property of a true zero. It is a set of numbers in which the ratios between numbers can be meaningfully interpreted. The characteristics in interval and ratio scales are perhaps most often referred to as variables, in contrast to attributes classified in nominal scale. Ratio scales also featured in this research, for example in questions A3 to A5.

The exploratory nature of this research demanded application of various scales described above. The data also possess comparability characteristics because the number of observation taken for each category of respondents and questions are all at 95% significant level. The bulk of the data is ordinal but were transformed into ratio measures with the

relative index to enable comparative analysis. The validity of the analysis conducted on these data were tested by applying established statistical tests on each of the the result, generating hypothesis at each juncture and accepting or rejecting them based on established criteria. These tests are now described in the following sections.

E4.0 Statistical Tests

Data analysis procedures namely, computing measures of central tendency and dispersion, as well as constructing one-way and multiway tables help the researcher summarise the general nature of the study variables and interrelationships among them. Such procedures constitute DESCRIPTIVE ANALYSIS and can provide valuable insights. In many studies, however, one must go beyond descriptive analysis in order to verify specific statements, or *hypothesis*, about the population (s) of interest. Data analysis aimed at testing specific hypothesis is usually called INFERENCE ANALYSIS. Inferential analysis involves verifying specific statements or hypothesis about the population.

As stated above, descriptive statistics, identifies the common statistical characteristics of mean, median, mode and standard deviations. Often, studies in construction management have used these characteristics without checking them with some standard tests as expected. This is one of the problem with some of the published works on this topic. To prevent this, tests were conducted on the statistical results in this research.

E4.1 Tests On Means

Often, it becomes necessary to check whether or not the mean obtained from a sample is representative of the mean of the population. hence some basic assumption must be made. first, it must be assumed that the population is standard-normally distributed and secondly the mean of the population must be assumed. If these assumptions are made then the following equation applies for a large population ($n > 30$):

$$Z = \frac{\bar{X} - \mu}{\sigma / \sqrt{n}}$$

In this formula for Z, both the standard deviation (σ) and the population mean (μ) are assumed to be known. When $n < 30$ the student t distribution rule applies with $n - 1$ degree of freedom. This equation forms the basis of tests on whether or not the means of two samples are from the same source, i.e., whether an observed difference between two sample means can be attributed to chance or whether it is an indication of the fact that the samples are from the same population. In such situation Z is estimated using the equation:

$$Z = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}}$$

To illustrate this with an example, in Chapter seven, 35 responses were analysed from each of the three categories of the samples. Now, the overall average effort on marketing programme as rated on a 10 -point scale, produced 4.02 for the contractor and 1.95 for the engineers with standard deviations of 1.49 and 0.58 respectively. To test whether the means are equal to one another, substitute these values in the equation above:

$$Z = \frac{4.02 - 1.95}{\sqrt{\frac{1.49^2}{35} + \frac{0.58^2}{35}}} = 7.67$$

Since this exceeds the critical value of Z at 95% confidence level (1.96), it can be said that there is significant difference between the means of effort expended on marketing activities by each of these two groups i.e., they are essentially different from one another.

E4.2 Chi Square Tests

The general purpose of Chi Square test is to see whether the distribution of data on a nominal scaled variable is consistent with what one would expect if the sample had come

from a pre-specific population. In order to ascertain that the distribution implied by the sample data is likely to be the same as that of some pre-specific population, *chi square* test become necessary. It was necessary in this research to test the performance of the model developed in Chapter 8 using the five principal component of the construct as independent variables.

E4.2.1 Standard Deviation Tests

The *chi - square* test has its root in the tests of standard deviation in which test are conducted on the equality of standard deviations of random samples. With the basic assumption that the population from which the samples were taken is normal, test of equality of two samples are based on the ratios of their standard deviation in comparison to the F-distribution:

$$F = \frac{\sigma_2^2}{\sigma_1^2} \quad \text{or} \quad \frac{\sigma_1^2}{\sigma_2^2}$$

Which ever is larger. The F is compared to the F at the appropriate level of significance for the study in order to accept or reject the hypothesis.

E4.2.2 Test of Goodness of Fit

Test of goodness of fit is used to test how an expected distribution (on the basis of theories or assumptions) fit, or describe, observed data even though some discrepancies are often expected. To check whether these discrepancies may be distributed to chance, χ^2 is determined using the formula:

$$\chi^2 = \sum \frac{(f - e)^2}{e}$$

Where f and e are the observed and expected frequency counts respectively. Examining the dispersion carefully shows that the lower the discrepancies between the observed and the expected frequency counts, the lower the computed value of χ^2 will be. When the observed and expected frequency distributions are identical, $\chi^2 = 0$. Therefore, the smaller

the computed value of χ^2 , the weaker the evidence against the null hypothesis (H_0). The general decision rule is to reject H_0 only when χ^2 is large enough to exceed cc_2 .

E4.3 Analysis of Variance

Analysis of variance (ANOVA) is a technique for detecting relationships between a metric scaled dependent variable and one or more categorical (nominal or ordinal) independent variables. As would be readily explained in statistical texts, ANOVA seeks to determine whether differences between more than two means is due to chance or due to actual differences between the means. There should be the basic normality assumption before conducting ANOVA. The basic decision making tool is the F variance ratio which is based on the expression:

$$F = \frac{\text{Estimate of Standard Deviation Based on Variation Among the Means}}{\text{Estimate of Standard Deviation Based on the Variation within the Samples}}$$

The various steps in calculating the F ration are usually expressed in a tabular forms as illustrated in Table E1:

Table E1 - Analysis of Variance (ANOVA) Table

Source of Variation	Degree of Freedom	Sum of Sq	Mean Sq	F
Treatments	K - 1	SS(Tr)	$MS(Tr) = \frac{SS(Tr)}{K - 1}$	$\frac{MS(Tr)}{MSE}$
Error	K(n-1)	SSE	$MSE = \frac{SSE}{K(n - 1)}$	
Total	Kn - 1	SST		

Where:

- SST

=

The measure of the total variation named the Total Sum of Square;
- SS(Tr)

=

Treatment Sum of Square which measures the variation among samples;
- SSE

=

The Error of Sum of Square which is the variation of means within

samples;

$$SST = SS(Tr) + SSE$$

The F value calculated for each variable/sample is then compared with F distribution Table at appropriate level of significance and degree of freedom to determine its contribution to explaining variance in data.

E4.4 Regression Analysis

Prediction of the average value of a dependent variable in terms of the known value of independent variable is the problem of regression. This problem is normally solved by the least square methods explained in most statistical texts. Different equations linking dependent variables to independent variables can be constructed depending on whether the relationship between them is linear or non linear. A linear regression model with one independent variable (i.e., one predictor) is of the form:

$$Y = a + bX$$

- where Y = Dependent variable
- a = Constant
- X = Independent variable

For multiple regression model, i.e., where there are two or more independent variables, the equation is of the form:

$$Y = a + b_1X_1 + b_2X_2 + ... b_nX_n + \epsilon$$

ϵ represents values for other factors not considered in this research such as the impact of external events on marketing.

In this research multiple regression was one of the statistical techniques employed in testing the validity of the model construct developed in Chapter 8 by predicting marketing results with independent variables. In regression analysis each b is tested for significant

contribution to the coefficient of determination (R^2) which is a measure of the proportion of the variance of dependent variable accounted for by the predictor variables.

To be able to test each b for significance a stepwise regression approach was adopted on the “SPSS” statistical package. In this approach, each independent variable is added to an existing model until all variables have been exhausted. It is therefore possible to calculate F ratio at each step and also determine R^2 . To calculate F ratio at each stage we use the formula:

$$F = \frac{\text{Mean Square of Regression}}{\text{Mean Square of Residuals}}$$

The F is compared to F distribution values at the appropriate degree of freedom (See APPENDIX F)

E4.5 Correlation Analysis

Correlation coefficient is an index (varying between -1 and +1) that measures the nature and the degree of association between two metric scaled (interval or ratio) variables. although frequently overlooked, a high coefficient of correlation does not guarantee that the relationship is not due to chance. In correlation analysis a test is conducted on the coefficients to test them for significance. The basic normality assumption is made before applying the formula below for the test:

$$t = \frac{r\sqrt{n - 2}}{\sqrt{1 - r^2}}$$

at $n - 2$ degrees of freedom

r = correlation coefficient

n = population

The value of t obtained is compared to the t distribution value at the $n - 2$ degree of freedom. This value must exceed t at 95% significant level to accept the correlation coefficients in in these thesis as being significant. This was used in chapter 8. through the SPSS package.

E5.0 Statistical Aids

The procedures involved in all the statistical tests described above are vigorous and tedious. To facilitate this test, three main statistical packages capable of analysing the data with in-built formulae were used. These are SPSS (Statistical Packages for Social sciences), STATWORKS and MICRO-SOFT EXCEL.

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APPENDIX F

APPENDIX F

Statistical Methods and Output

F1.0 Introduction

This Appendix describes details of the analysis done on the various variables and marketing activities described in this thesis.

F2.0 Relationships

One of the objectives of this research (1.2.0), was to determine relationship between performance on these objectives and those activities by establishing statistical correlation between marketing objectives and various inputs into marketing activities:

- (1) size of the organisation defined by annual turnover;
- (2) size of organisation defined by number of employees;
- (2) employment of full-time marketing professionals;
- (4) use of external marketing agents.
- (5) formal marketing planning;
- (6) monitoring and control of marketing programme;
- (7) time range for individual firms marketing plan
- (8) expenditure on marketing programmes
- (9) corporate value, i.e., importance attached to marketing objectives.
- (10) measure of corporate marketing orientation;
- (11) measure of efforts expended on marketing programmes
- (12) measure of perceived effectiveness of marketing programmes

These variables are coded into a computer package (SPSS) by assigning scales as described in Chapter 6. One of the objectives of this research was to determine if there are any

relationship between performance on the objectives and the inputs into the various marketing activities. To achieve this, a series of statistical tests and analysis by applying various statistical techniques using the statistical package **SPSS**. These techniques include:

- (1) correlations tests between organisational profile, marketing orientation, activities pursued, objectives and performance will be investigated;
- (2) simple regression and multiple regression analysis, this is with a view to estimating the strength of relationship between achievement on marketing objectives and the various variables;
- (3) multiple regression models

F2.1 Correlation Tests

Every day managers make personal and professional decisions that are based upon prediction of future events. To make these forecasts, they rely upon relationship between what is already known and what is to be estimated. After the pattern of the relationships has been learned, correlation analysis can then be applied to determine the degree to which the variables are related. Correlation analysis, then, tells us how well the estimating equation actually describes the relationship.

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to another.

Table F1:Correlation Coefficients

	A1	A2	B1	B2	C1	C2	C3	D1
A1	1.0000							
A2	.9809**	1.0000						
B1	.4092**	.4174**	1.0000					
B2	.2751**	.2772**	.2632**	1.0000				
C1	.3155**	.3351**	.4116**	.3731**	1.0000			
C2	.2976**	.3227**	.4541**	.3160**	.6666**	1.0000		
C3	.2555**	.2373*	.3595**	.3497**	.3913**	.4799**	1.0000	
D1	.5608**	.5521**	.5075**	.2818**	.3785**	.4718**	.3911**	1.0000
D2	.2369*	.2688**	.3723**	.1791	.3512**	.5274**	-.0063	.0007
D3	-.0820	-.0907	-.0573	.0325	.0420	.1249	.1197	.4103**
E1	.2185*	.2320*	.2207*	.1641	.1855	.2375*	.2493*	.3480**
E2	.1389	.1636	.3009**	.2966**	.5260**	.4768**	.1827	.4300**
P1	.2141*	.2308*	.2371*	.1586	.2306*	.3006**	.2767**	.8079**
P2	.3955**	.4118**	.3303**	.2747**	.3685**	.4383**	.2767**	.8079**
	D2	D3	E1	E2	P1	P2		
D2	1.0000							
D3	.0938	1.0000						
E1	.4609**	.0616	1.0000					
E2	.5123**	.3502**	.3254**	1.0000				
P1	.3989**	.1354	.5939**	.2910**	1.0000			
P2	.4536**	.1916	.3929**	.3501**	.5618**	1.0000		

* - Signif. LE .05 ** - Signif. LE .01 (2-tailed) " . " is printed if a coefficient cannot be computed

F2.0 Regression Analysis

From these observations, further attempts were made to predict firms' performance index with individual variables using statistical method of simple linear regression analysis with the SPSS window version. These estimates were also plotted as shown on figures 1 to 12 below.

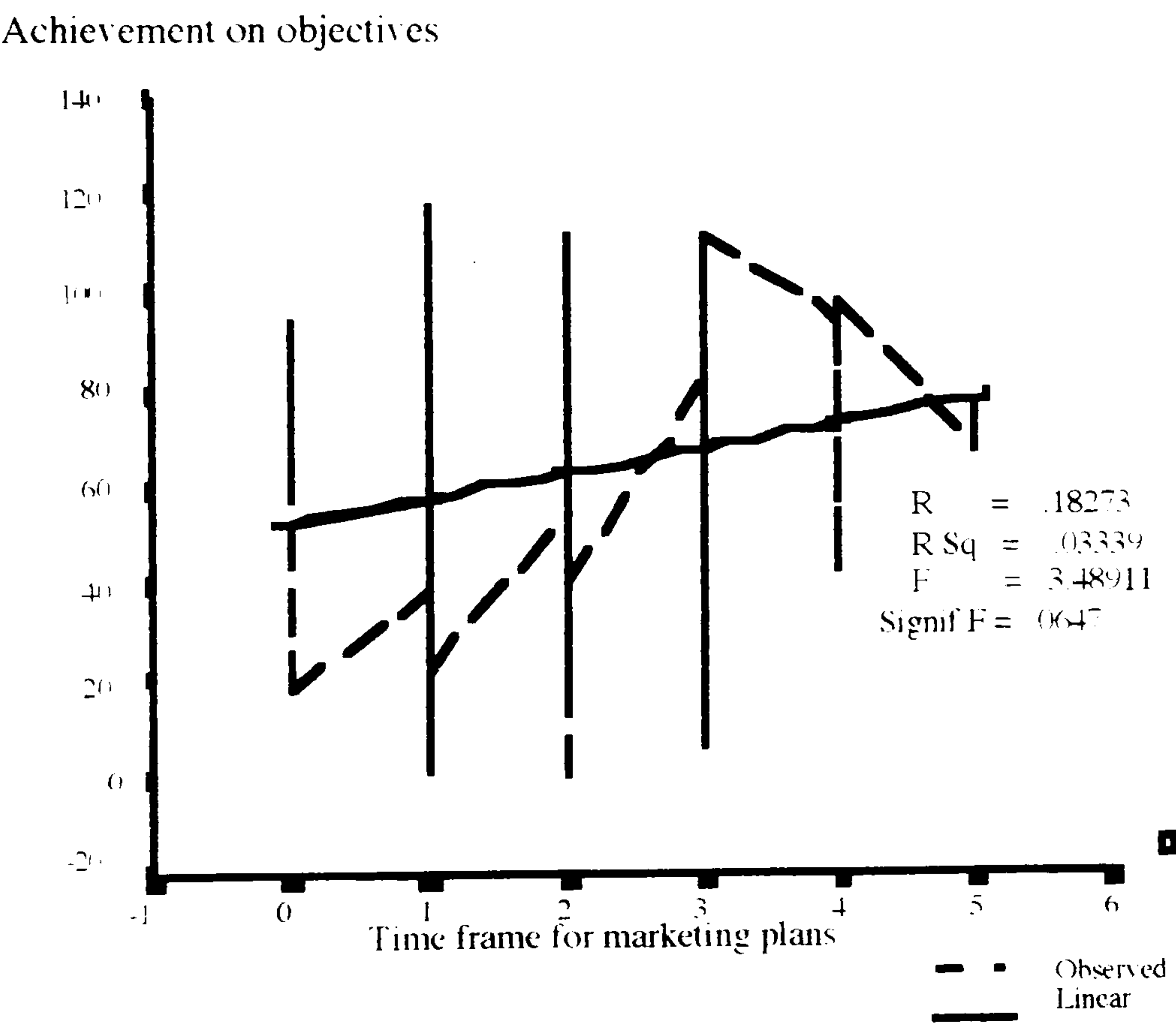


Figure F1. Estimating marketing results with time frame for markting plans

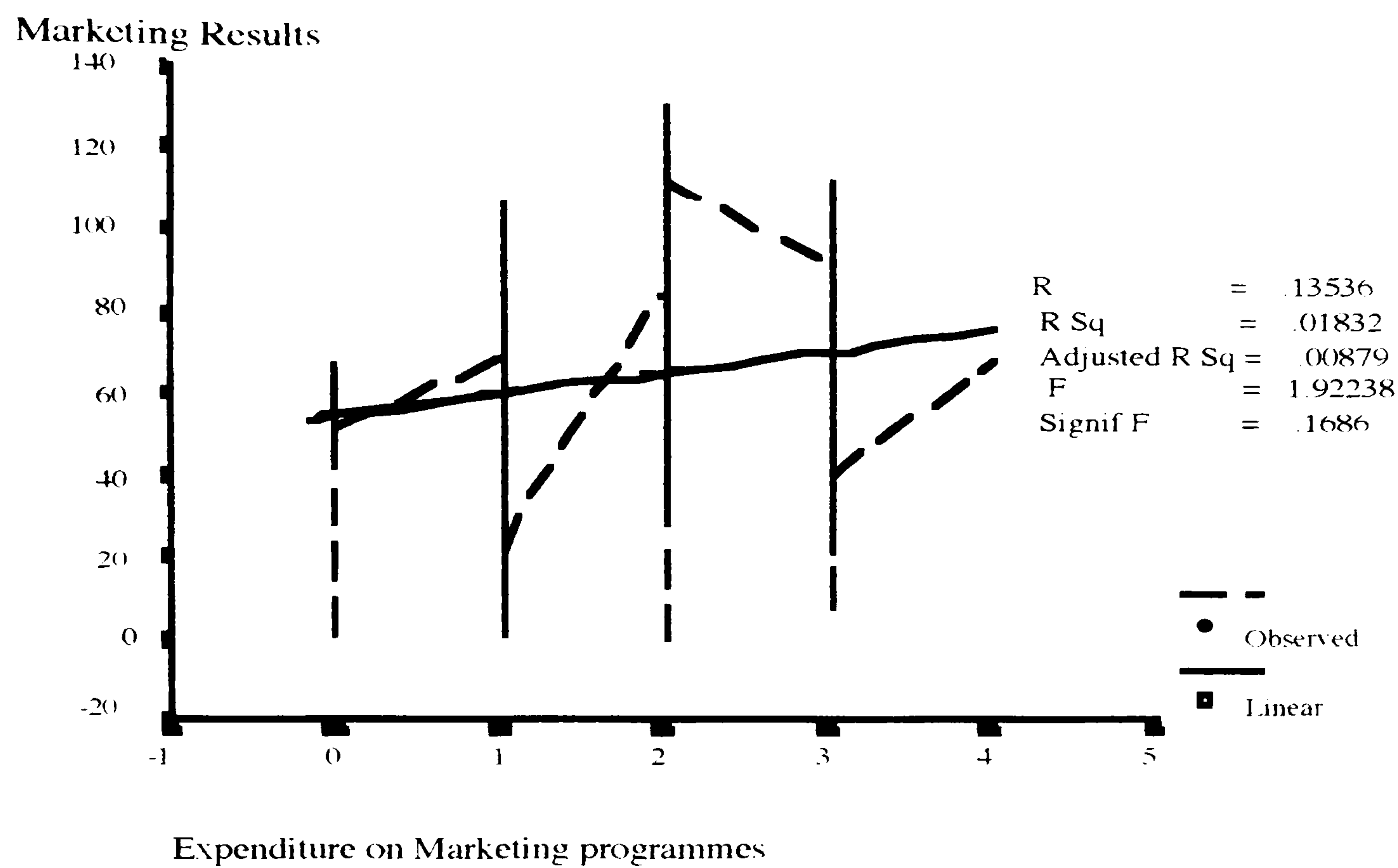


Figure F.2. Estimating marketing results with expenditure

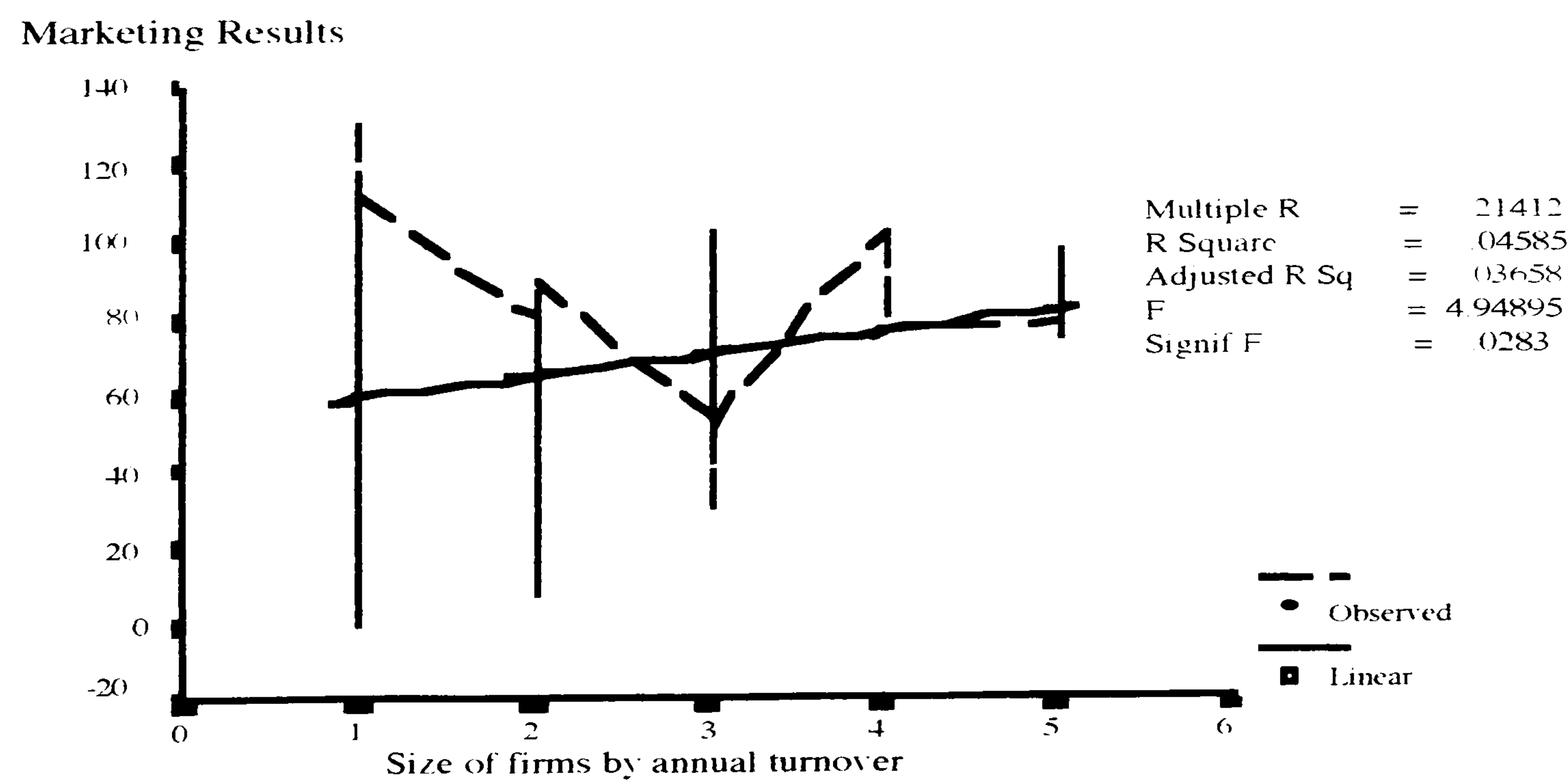


Figure F.3. Estimating Marketing results with turnover

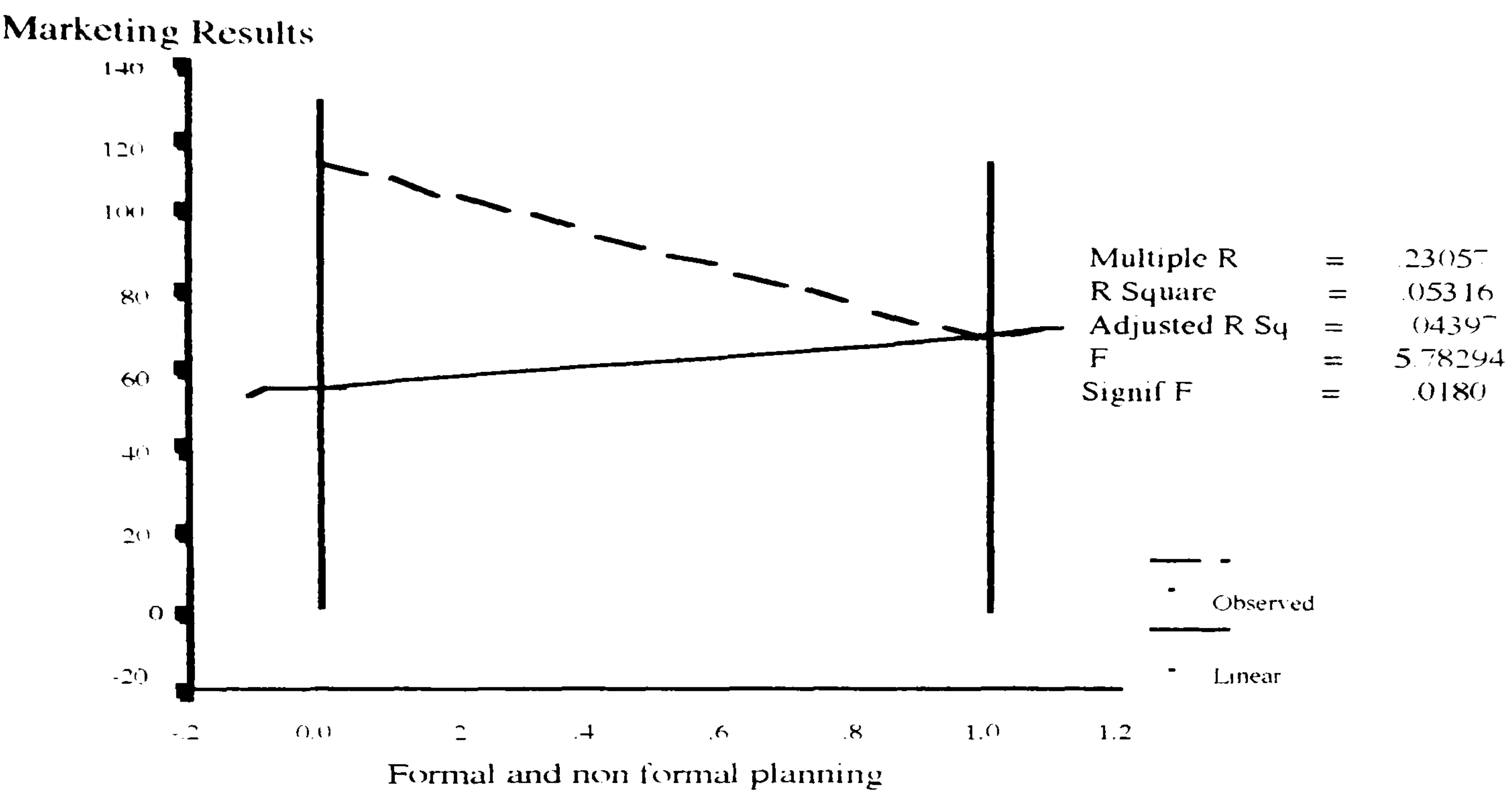


Figure F4. Estimating marketing results wit formal planning

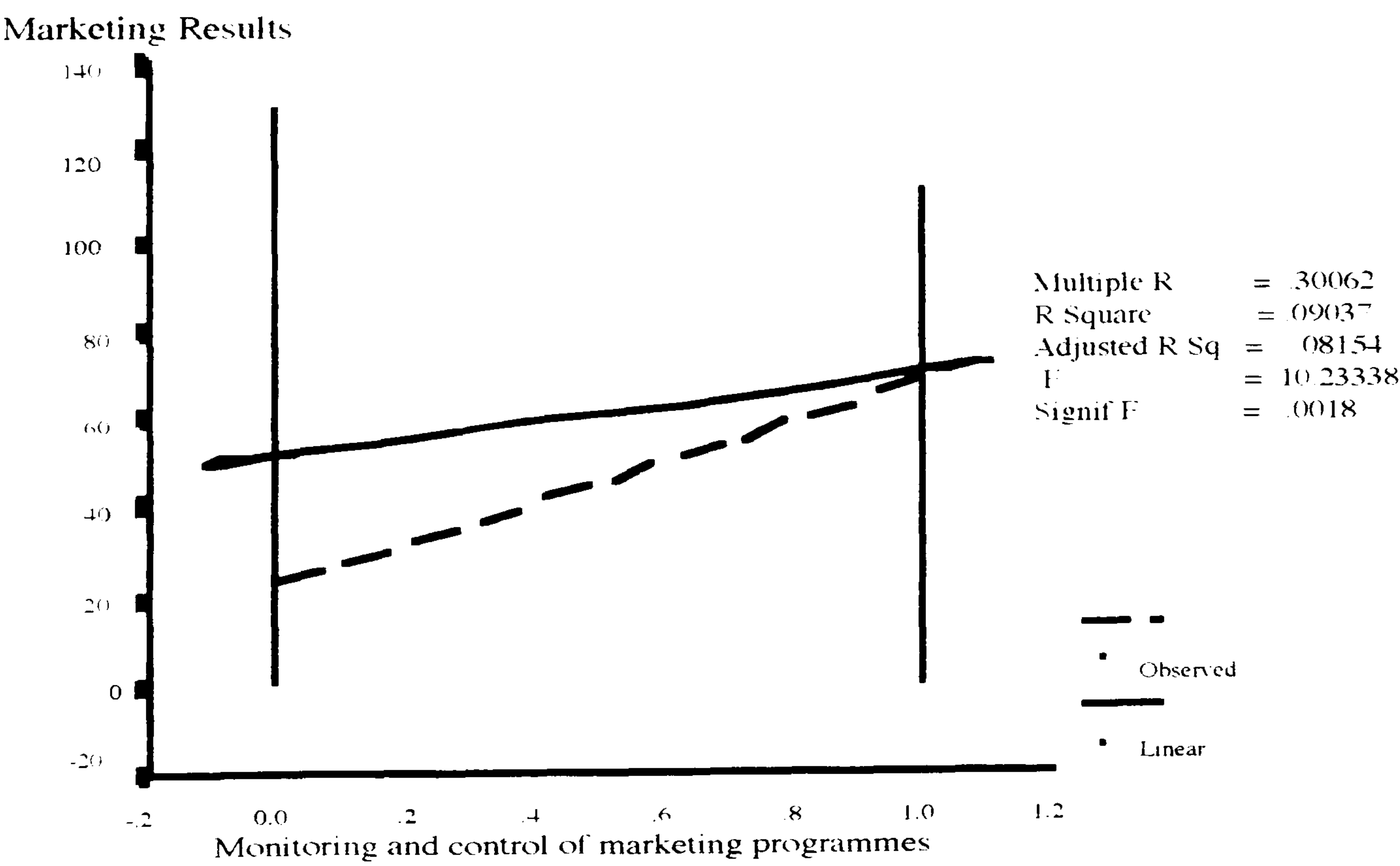
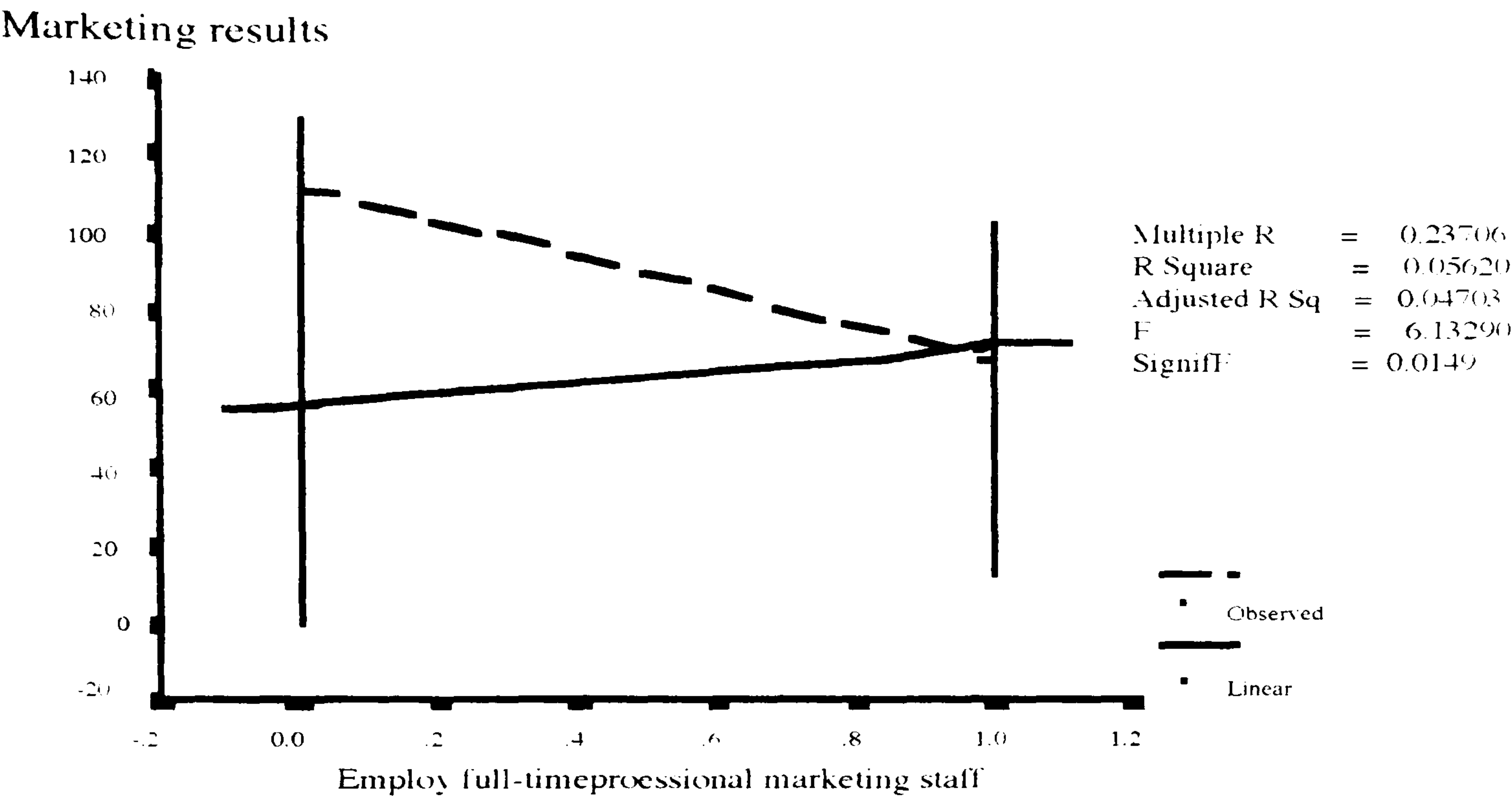


Figure F5. Estimating marketing results with control of marketing programmes



FigureF6. Estimating marketing results with use of marketing staff

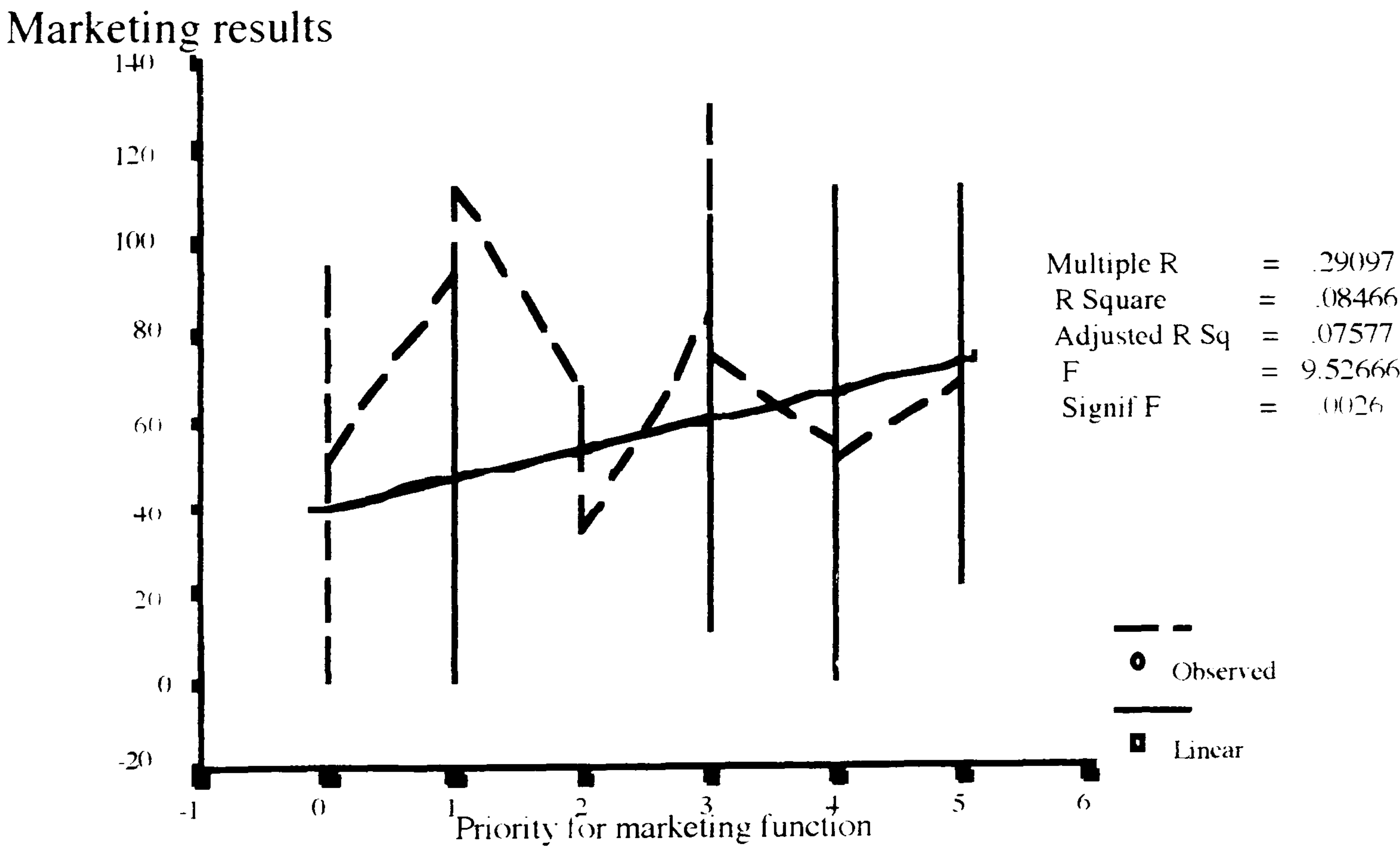


Figure F7. Estimating marketing results with priority for marketing programmes

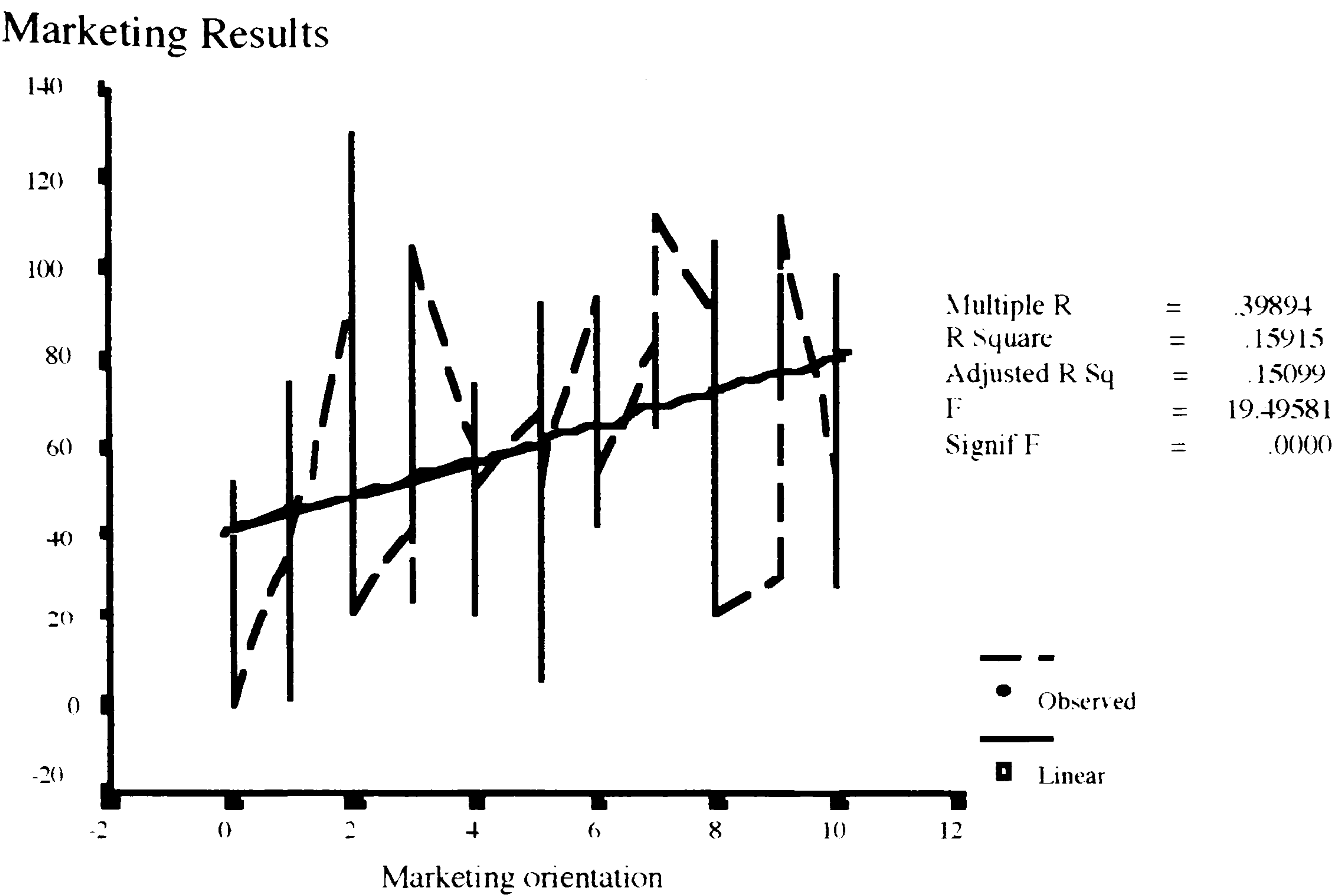


Figure F.8. Estimating marketing results with marketing orientation

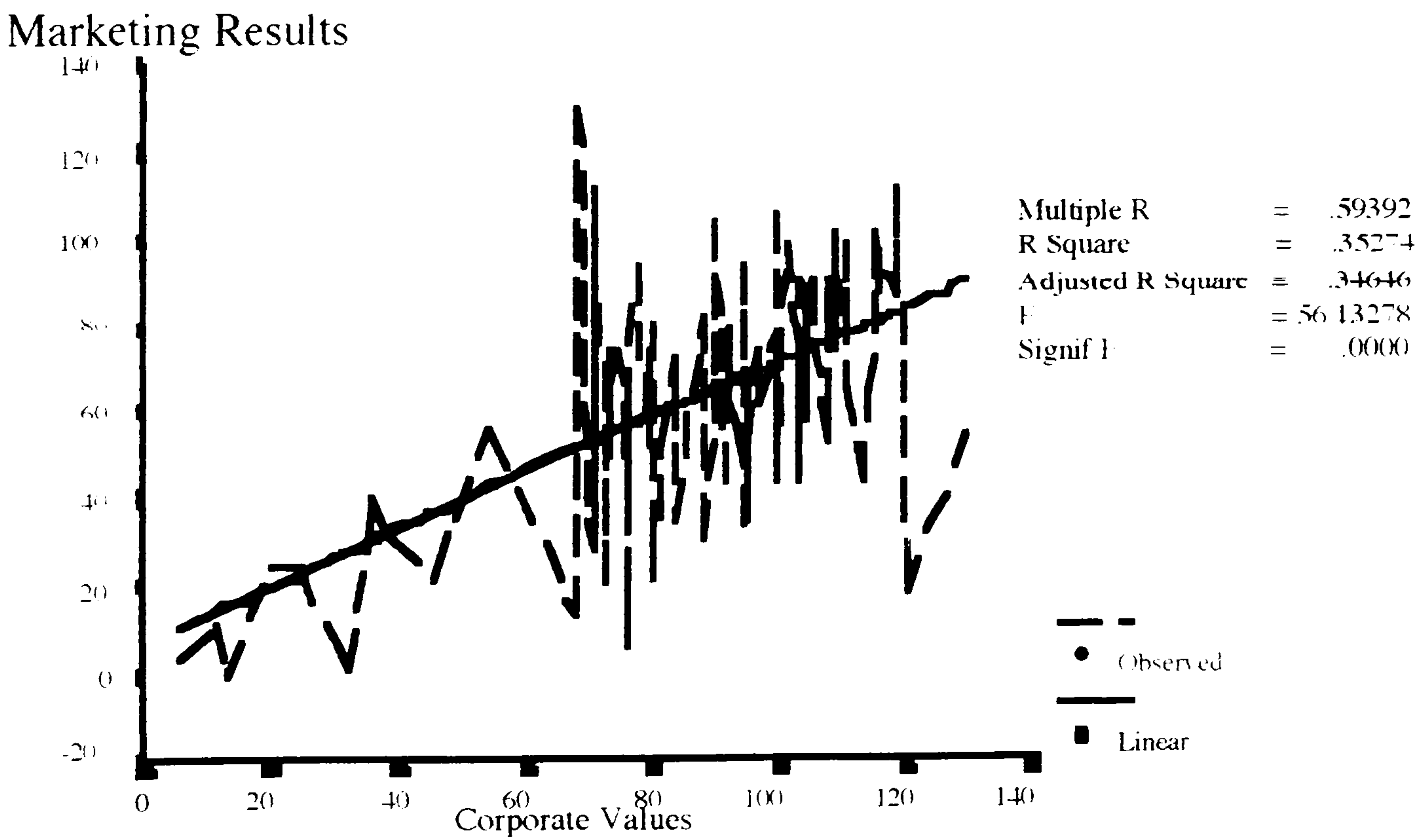


Figure F9. Estimating marketing results with corporate values

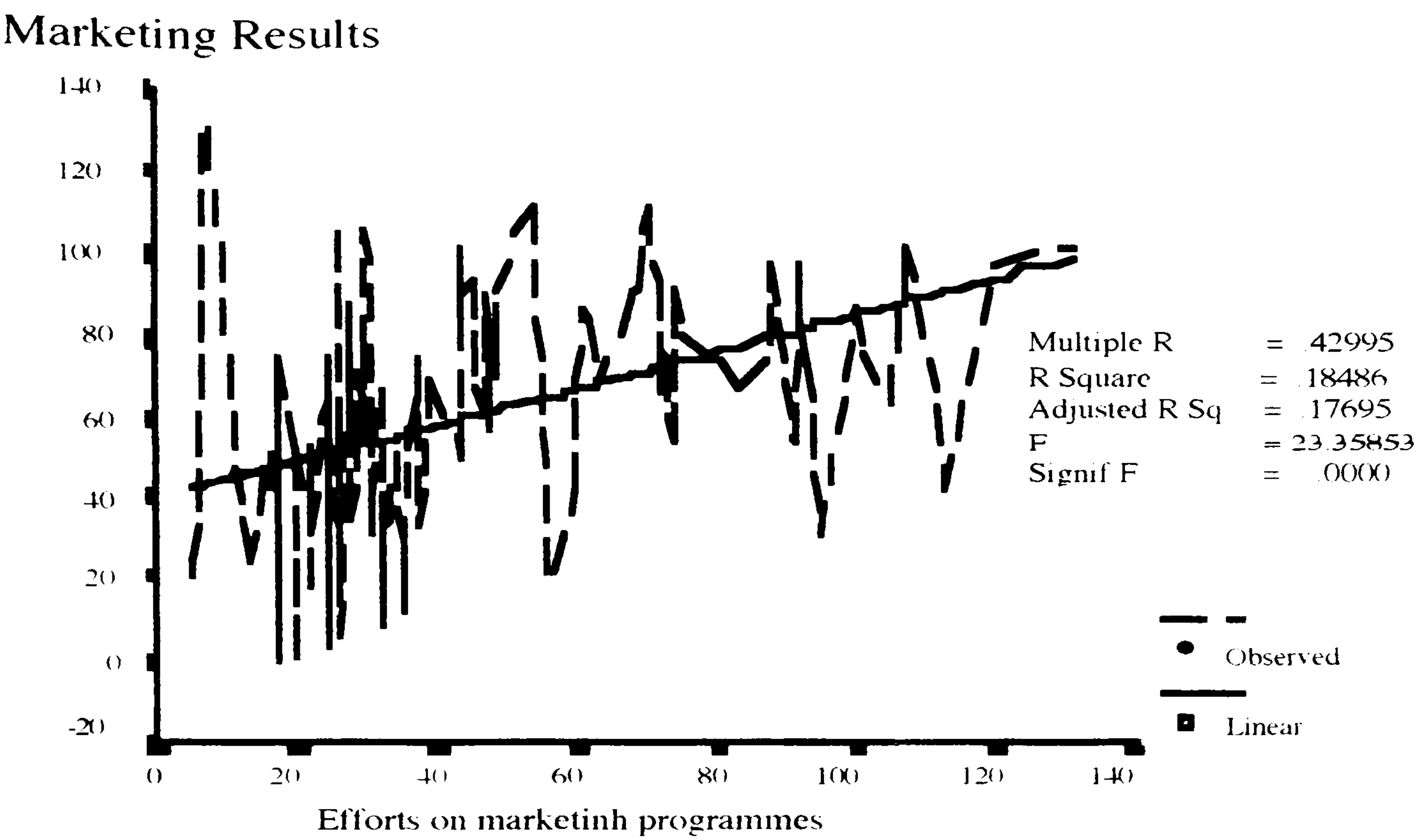


Figure F10. Estimating marketing results with effort

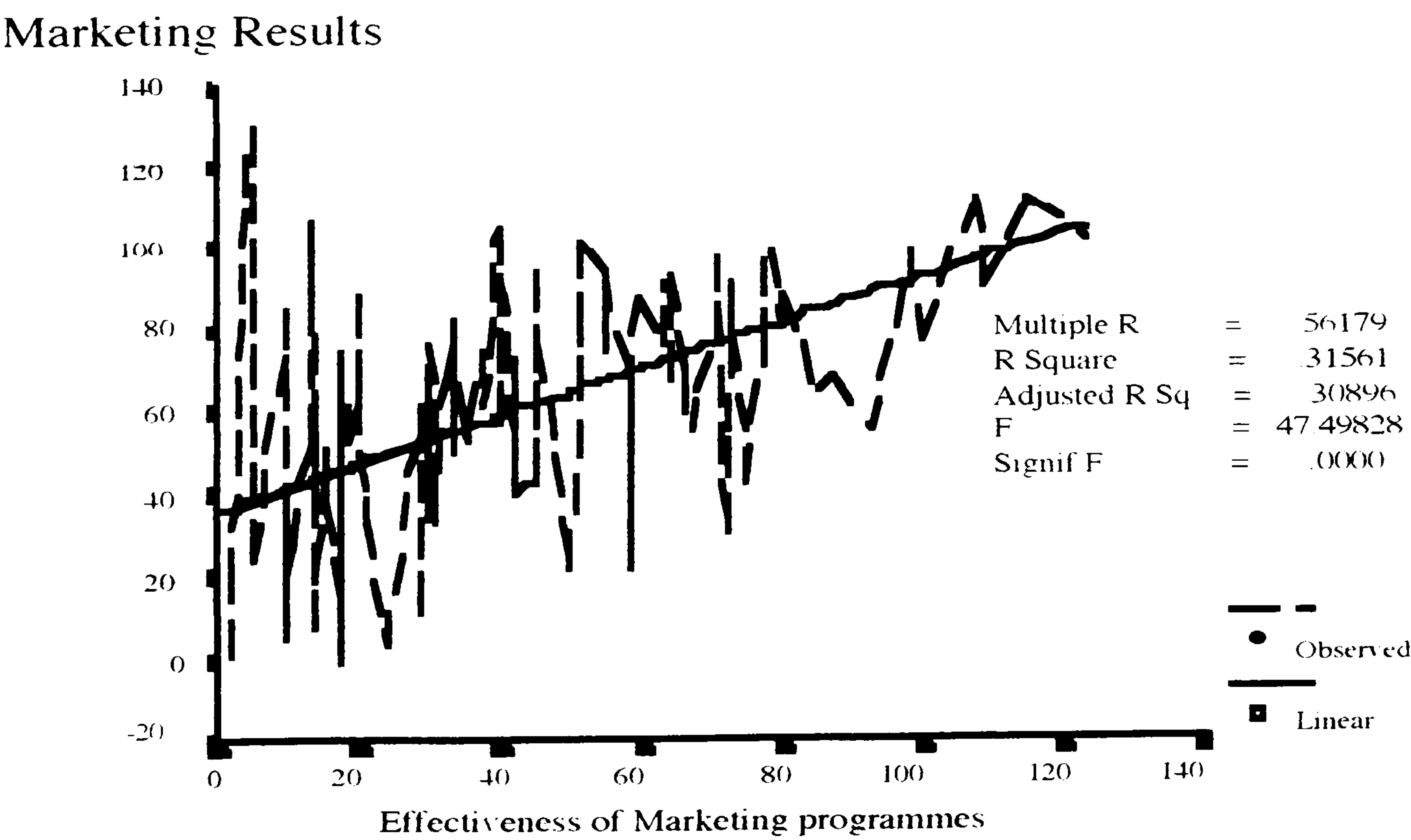


Figure F11. Estimating marketing results with effectiveness of marketing activities.

Table F2. Results of Sensitivity Analysis

Resultant Grading function with changes in the variables					
% Change in Variables (1)	With Change in A (2)	With change in B (3)	With change in C (4)	With change in D (5)	With change in E (6)
100	46.80	44.52	45.52	55.69	64.16
90	46.43	44.34	45.29	54.40	62.02
80	46.03	44.20	45.02	53.11	59.89
70	45.60	44.02	44.73	51.83	57.75
60	45.22	43.84	44.46	50.88	55.62
50	44.81	43.67	44.18	49.88	53.48
40	44.41	43.49	43.90	47.96	51.34
30	44.01	43.32	43.63	46.67	49.21
20	43.60	43.15	43.35	45.38	47.07
10	43.20	42.97	43.08	44.10	44.94
0	42.80	42.80	42.80	42.80	42.80
-10	42.39	42.60	42.52	41.51	40.66
-20	41.99	42.45	42.24	40.22	38.53
-30	41.59	42.27	41.96	38.93	36.39
-40	41.20	42.10	41.67	37.64	34.26
-50	40.80	41.93	41.41	36.35	32.12
-60	40.40	41.75	41.14	35.06	29.98
-70	39.97	41.58	40.86	33.77	27.85
-80	39.57	41.40	40.58	32.48	25.71
-90	39.20	41.23	40.30	31.20	23.58
-100	38.76	41.06	40.03	29.90	21.44

Table F3 percentage Changes in Grading Function

Corresponding % changes in Grading function with changes in the variables						
% Changes	% change in G with A	% Change in G with B	%Change in G with C	% Change in G with D	%Change in G with E	Overall Mean of % changes
(1)	(2)	(3)	(4)	(5)	(6)	(7)
-100	-4.00	-1.72	-2.77	-12.89	-21.36	-8.55
-90	-3.63	-1.54	-2.49	-11.6	-19.22	-7.7
-80	-3.32	-1.4	-2.22	-10.31	-17.09	-6.87
-70	-2.80	-1.22	-1.93	-9.03	-14.95	-5.98
-60	-2.42	-1.04	-1.66	-7.74	-12.82	-5.14
-50	-2.01	-0.96	-1.38	-7.08	-10.64	-4.41
-40	-1.61	-0.69	-1.1	-5.16	-8.54	-3.41
-30	-1.21	-0.52	-0.83	-3.87	-6.41	-2.47
-20	-0.80	-0.35	-0.55	-2.58	-4.27	-1.71
-10	-0.40	-0.15	-0.28	-1.30	-2.14	-0.85
0	0.00	0.00	0.00	0.00	0.00	0.00
10	0.41	0.20	0.28	1.29	2.14	0.86
20	0.81	0.35	0.56	2.58	4.27	1.71
30	1.21	0.53	0.84	3.87	6.41	2.57
40	1.60	0.70	1.13	5.16	8.54	3.43
50	2.00	0.87	1.39	7.08	10.68	4.28
60	2.40	1.05	1.66	7.74	12.82	5.13
70	2.83	1.22	1.94	9.03	14.95	5.99
80	3.32	1.40	2.22	10.31	17.09	6.85
90	3.60	1.57	2.50	11.60	19.22	7.7
100	4.04	1.74	2.77	12.90	21.36	8.55

APPENDIX G

Glossary

Attitude	A person’s underlying mental state capable of influencing his or her choice of actions and maintaining consistency across those actions.
Attribute	A personal or demographic characteristic of study respondents.
Behavioral Variable	A variable that captures an activity engaged in by study respondents.
Comparative Rating Scale	A scale that seeks respondents’ feelings about an issue/object by explicitly asking them to compare the issue/object with a specific frame of reference.
Competitiveness	Ability to demonstrate differential advantage over the competitors in the minds of the target audience.
Controlling	Getting feedback from marketplace and taking needed corrective action
Corporate diversity.	An index which reflects the number of four digits American S. I. C. industries in which the company operates, the percentage of total corporate employment in each industry and the degree of similarity or difference amongst the industry in which it operates.
Information	The product of analysis and interpretation of data

Investment intensity	Referring to the ratio of total investment to sales
Marketing-	The management process for identifying, anticipating and satisfying customer requirements profitably.
Marketing Audit-	A comprehensive, systematic, independent and periodic ` examination of a company's - or business unit's - marketingenvironment, objectives, strategies and activities with a view to determining problem areas and opportunities and recommending a plan of action to improve the company's performance.
Marketing Concept-	The philosophy of customer orientation urging firms to uncover customer needs first and then coordinate all their activities to satisfy those needs.
Marketing Decision Support System -	A marketing information system that permits managers to interact with it and request special types of data analysis or reports on an as-needed basis.
Marketing expenditure	This is the total cost of sales force, advertising, sales promotion, marketing research and marketing administration but not physical distribution.
Marketing Information System -	A continuing and interactive structure of people, equipment, and proceedures designed to gatgher, sort, analyse, evaluate, and distribute pertinent, timely, and accurate information to marketing decision makers.
Marketing Mix -	The set of product, promotion, price and distribution (or

place) decisions related to a firm’s market offerings.

Marketing Research -	A set of techniques and principles of systematically collecting, recording, analysing, and interpreting data that can aid decision makers who are involved with marketing goods, services, or ideas.
Market Share-	This is the ratio of sales, by a business, in a given time period, to total sales by all competitors in the same market.
Product (service) quality -	The quality of each participating company’s offerings, appraised in terms of what was percentage of sale of product from each business, in each year, which were superior to those competitors.
Productivity	Productivity is the real value added of a company’s output divided by the amount of capital , materials, labour the company uses.
Quality assurance	The quality of each participating company’s offerings, appraised in terms of the percentage of sale of product from each business, in each year, which wsuperior to those competitors.
Return on investment	The ratio of income to investment.